Title 33
ENVIRONMENTAL QUALITY
Part IX. Water Quality
Subpart 1. Water Pollution Control
Chapter 11. Surface Water Quality Standards

§1101. Introduction

A. The purpose of this Chapter is to establish surface water quality standards which will:

1. provide for the protection and preservation of the abundant natural resources of Louisiana's many and varied aquatic ecosystems;

2. protect the public health and welfare that might otherwise be threatened by degradation of water quality;

3. protect or enhance the quality of public waters for designated uses; and

4. serve the objectives of the Louisiana Water Control Law and Federal Clean Water Act (hereafter referred to as the Clean Water Act).

B. The water quality standards provided in this Chapter are provisions of Louisiana state regulations and consist of:

1. policy statements pertinent to water quality that are necessary to achieve the objectives of the standards;

2. designated uses for which waters of the state are to be protected; and

3. criteria which specify general and numerical limitations for various water quality parameters that are required for designated water uses.

C. The water quality standards described in this Chapter are applicable to surface waters of the state and are utilized through the wasteload allocation and permit processes, to develop effluent limitations for point source discharges to surface waters of the state. They can also form the basis for implementing the best management practices for control of nonpoint sources of water pollution.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 10:745 (October 1984), amended LR 15:738 (September 1989), LR 20:883 (August 1994), amended by the Office of the Secretary, Legal Affairs Division, LR 33:826 (May 2007).

§1103. Authorization

A. Pursuant to the specific authorization provided for in Section 2074.B(1) of the Louisiana Water Control Law (R.S. 30:2071-2078) and in conformity with Section 303(c) of the Clean Water Act (P.L. 92-500 as amended) and 48 FR 51405, November 8, 1983, the state of Louisiana has established these surface water quality standards to prohibit, control, or abate water pollution in state waters.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 10:745 (October 1984), amended LR 15:738 (September 1989).

§1105. Definitions

Acute Toxicity—any lethal or deleterious effect on representative sensitive organisms that results from a single dose or exposure of a chemical or mixture of chemicals within a short period of time, usually less than 96 hours.

Administrative Authority—the Secretary of the Department of Environmental Quality, or his designee or the appropriate assistant secretary or his designee.

Ambient Toxicity—the effect measured by a toxicity test on a sample collected from a water body.

Artificial Heat—heat derived from unnatural sources, such as power plants and other industrial cooling processes.

Background Condition—a concentration of a substance in a particular environment that is indicative of minimal influence by human (anthropogenic) sources.

Biological and Aquatic Community Integrity—the condition of the aquatic community inhabiting a specified habitat as measured by community structure and function.

Bottomland Hardwood Swamps—those areas inundated or saturated by surface water or groundwater of negligible to very low salinity at a frequency and duration sufficient to support, and that under normal conditions do support, bottomland hardwood vegetation. These ecosystems are commonly found wherever streams or rivers occasionally cause flooding beyond their channel confines. They are deciduous forested wetlands, made up of different species of gum (*Nyssa* spp.), oak (*Quercus* spp.), dwarf palmetto (*Sabal minor*), and bald cypress (*Taxodium distichum*), and other species. These swamps cannot tolerate continuous flooding; typically areas are flooded two to six months per year.

Brackish Marshes—those areas inundated or saturated by surface water or groundwater of moderate salinity at a frequency and duration sufficient to support, and that under normal circumstances do support, brackish emergent vegetation. Typical vegetation includes bulltongue (*Sagittaria* spp.), wild millet (*Echinochloa walteri*), bullwhip (*Scirpus califomicus*), sawgrass (*Cladium jamaicense*), wiregrass *(Spartina patens)*, three-cornered grass *(Scirpus olneyi)*, and widgeongrass *(Ruppia maritima)*. *Brackish marshes* are also characterized by interstitial water salinity that normally ranges between 3 and 15 parts per thousand (ppt) or practical salinity units (psu).

Brackish Water—surface water (creeks, bayous, rivers, lakes, estuaries) having an average salinity of 2 parts per thousand or greater and less than 10 parts per thousand; does not apply to wetland interstitial salinity regime.

Chronic Toxicity—toxicity that, after long-term exposure, exerts sublethal negative effects on, or is lethal to, representative, sensitive organisms.

Clean Techniques—an integrated system of sample collection and laboratory analytical procedures designed to detect concentrations of trace metals below criteria levels and eliminate or minimize inadvertent sample contamination that can occur during traditional sampling practices.

Cypress-Tupelo Swamps—those areas inundated or saturated by surface water or groundwater of negligible to very low salinity at a frequency and duration sufficient to support, and that under normal circumstances do support, cypress-tupelo vegetation. Typical vegetation includes water tupelo (*Nyssa Sylvatica* var. *aquatica*), bald cypress (*Taxodium distichum*), red maple (*Acer rubrum*), buttonbush (*Cephalanthus occidentalis*), and common wax myrtle (*Myrica cerifera*). *Cypress-tupelo swamps* can tolerate continuously flooded conditions and are divided into two subtypes: continuously flooded and seasonally flooded. Continuously flooded swamps are those areas that have standing water present all year round. They range from forests with a closed canopy to open canopy conditions with understory freshwater emergent wetland vegetation. Seasonally flooded swamps are those areas that are typically flooded for more than six months per year. They typically have a closed canopy that limits understory vegetation.

Designated Use—a use of the waters of the state as established by the water quality standards provided in LAC 33:IX.1111. These uses include, but are not limited to, primary and secondary contact recreation, fish and wildlife propagation, drinking water supply, oyster propagation, agriculture, and outstanding natural resource waters.

Diffuser—a device or defined technology that provides for the rapid and efficient mixing of wastewater effluents with the receiving water so that toxic conditions and other impacts in the vicinity of the discharge are minimized.

Dissolved Oxygen—the amount of oxygen dissolved in water, commonly expressed as a concentration in terms of milligrams per liter (mg/L).

Drinking Water Supply—a surface or underground raw water source which, after conventional treatment, will provide safe, clear, potable, and aesthetically pleasing water for uses which include, but are not limited to, human consumption, food processing and cooking, and inclusion as a liquid ingredient in foods and beverages.

Ecoregion—a relatively homogeneous area of similar ecological characteristics such as climate, land surface form, soils, potential natural vegetation, land use, hydrology, and other ecologically relevant variables.

Effluent—wastewater discharged to the waters of the state.

Effluent Limitation—any applicable state or federal quality or quantity limitation that imposes any restriction or prohibition on quantities, discharge rates, and concentrations of pollutants discharged into the waters of the state.

Estuary—an area where freshwater systems and saltwater systems interact. Such areas can extend from coastal areas into inland rivers and streams as far as the limit of tidal influence or as far as the saltwater wedge reaches. Estuarine salinities are variable and influenced by physical (i.e., tide, sedimentation, precipitation), chemical (i.e., variable salinities), and biological (i.e., vegetation, faunal populations) factors.

Excepted Use—a water body classification reflecting natural conditions and/or physical limitations that preclude the water body from meeting its designated use(s). Such classifications include, but are not limited to, man-made waters, naturally dystrophic waters, and intermittent streams.

Existing Use—those uses actually attained in the water body on or after November 28, 1975. They may or may not be designated uses.

Fecal Coliform—a gram negative, non-spore-forming, rod-shaped bacteria found in the intestinal tract of warm-blooded animals.

Forested Wetlands—a category of wetlands that includes *bottomland hardwood swamps*, *cypress-tupelo swamps*, and *oligotrophic seasonally flooded pine forests* as defined in this Section.

Fresh Warmwater Biota—aquatic life species whose populations typically inhabit waters with warm temperatures (seasonal averages above 20°C, 68°F) and low salinities (less than 2 parts per thousand), including, but not limited to, black basses and freshwater sunfish and catfish and characteristic freshwater aquatic invertebrates and wildlife.

Fresh Water—surface water (creeks, bayous, rivers, lakes) having an average salinity of less than 2 parts per thousand; does not apply to wetland interstitial salinity regime.

Freshwater Emergent Wetlands (including *freshwater marshes*)—those areas inundated or saturated by surface water or groundwater of negligible to very low salinity at a frequency and duration sufficient to support, and that under normal circumstances do support, freshwater emergent vegetation. Typical vegetation includes cattail (*Typha angustifolia*), bulltongue (*Sagittaria* spp.), maiden cane (*Panicum hemitomon*), water hyacinth (*Eichomia crassipes*), pickerelweed (*Ponterderia cordata*), alligatorweed (*Altemanthera philoxeroides*), and *Hydrocotyl* spp. *Freshwater emergent wetlands* also are characterized by interstitial water salinity that is normally less than 2 ppt or psu. There are two subtypes of *freshwater emergent wetlands*: floating and attached. Floating wetlands are those areas where the wetland surface substrate is detached and is floating above the underlying deltaic plain (also called "buoyant" and "flotant"). Attached wetlands are those areas where the vegetation is attached to the wetland surface and is contiguous with the underlying wetland substrate and can be submerged or emergent.

g/L—grams per liter.

Harmonic Mean Flow—a statistical value used to calculate permit limits where 7Q10 flow is not appropriate.

This calculation is intended for positive numbers and non-zero values, thereby, precluding the use of negative flow values. The formula is as follows:

$$\frac{1}{H} \equiv \frac{1}{n} \cdot \sum_{n} \frac{1}{x_i}$$

where:

H = harmonic mean
n = number of samples
x = actual samples

Intermittent Streams—streams that provide water flow continuously during some seasons of the year but little or no flow during the drier times of the year.

LC50—the numerical limit or concentration of a test material that is lethal to 50 percent of the exposed aquatic organisms within a specified period of time.

Man-Made Water Body—a body of water that has been anthropogenically created or altered and is used primarily for drainage, conveyance, or retention of water for purposes of irrigation, transportation, sanitation, flood relief, water diversion, or natural resource extraction. The physical and hydrological characteristics of man-made water bodies are not conducive to the establishment of a balanced population of aquatic biota or to the full support of recreational activities.

Marine Water—of, relating to, or found in surface waters with average salinities greater than or equal to 10 parts per thousand; does not apply to wetland interstitial salinity regime.

µg/L—micrograms per liter.

mg/L—milligrams per liter.

Naturally Dystrophic Waters—waters which are stained with organic material and which are low in dissolved oxygen because of natural conditions.

ng/L—nanograms per liter.

Non-Forested Wetlands—a category of wetlands that includes *freshwater emergent wetlands*, *brackish marshes*, and *salt (saline) marshes* as defined in this Section.

Nonpoint Source—a diffuse source of water pollution that does not discharge through a point source, but instead, flows freely across exposed natural or man-made surfaces such as agricultural or urban runoff and runoff from construction, mining, or silviculture activities that are not regulated as point sources.

Oligotrophic Seasonally Flooded Pine Forests—palustrine, seasonally saturated pine communities on hydric soils that may become quite dry for part of the year and generally occur in flat or nearly flat areas not associated with a river or stream system. They are usually dominated by loblolly pine (*Pinus taeda*). These pine forests are seasonally flooded and receive very low nutrient inputs. Because of their oligotrophic nature, these forests are characterized by unique understory vegetation communities that may include insectivorous plants.

Person—any individual, municipality, public or private corporation, partnership, firm, the United States Government and any agent or subdivision thereof, or any other juridical person, which shall include, but not be limited to, trusts, joint stock companies, associations, the state of Louisiana, political subdivisions of the state, commissions, and interstate bodies.

Point Source—a 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 are or may be discharged. This term does not include return flows from irrigated agriculture.

Primary Contact Recreation—any recreational or other water contact use involving prolonged or regular full-body contact with the water and in which the probability of ingesting appreciable amounts of water is considerable. Examples of this type of water use include swimming, skiing, and diving.

Process Heat—heat derived from unnatural sources such as power plants and other industrial cooling processes.

Receiving Waters—the waters of the state into which an effluent is, or may be, discharged.

Salt (*Saline*) *Marshes*—those areas that are inundated or saturated by surface water or groundwater of salinity characteristic of nearshore Gulf of Mexico ambient water at a frequency and duration sufficient to support, and that under normal circumstances do support, saline emergent vegetation. Typical vegetation includes oystergrass (*Spartina alterniflora*), glasswort (*Salicomia* spp.), black rush (*Juncus roemerianus*), saltwort (*Batis maritima*), black mangrove (*Avicennia germinans*), and salt grass (*Distichlis spicata*). *Salt marshes* are also characterized by interstitial water salinity that normally exceeds 16 ppt or psu.

Secondary Contact Recreation—any recreational or other water contact use in which body contact with the water is either incidental or accidental and the probability of ingesting appreciable amounts of water is minimal. Examples of this type of water use include fishing, wading, and boating.

7Q10 Flow—the minimum average stream flow for seven consecutive days with a recurrence interval of once every 10 years.

Surface Water—all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems, and other surface waters, natural or artificial, public or private, within the state or under its jurisdiction that are not a part of a treatment system allowed by state law, regulation, or permit.

Total Dissolved Solids (TDS)—the amount of solid material dissolved in water, commonly expressed as a concentration in terms of mg/L.

Total Suspended Solids (TSS)—the amount of solid material suspended in water, commonly expressed as a concentration in terms of mg/L.

Toxic Substances—elements, compounds, or mixtures that at sufficient exposure levels induce deleterious acute or chronic physiological effects on an organism.

Use Attainability Analysis (UAA)—a structured scientific assessment of the factors (chemical, physical, biological, and economic) affecting the attainment of designated water uses in a water body. Recommendations for the revision of the water quality standards may be based upon a *use attainability analysis.*

Wastewater—liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.

Water Body Exception Classification—a water body classification indicating natural conditions and/or physical limitations that preclude the water body from meeting water quality criteria. Classifications include, but are not limited to, man-made water bodies, naturally dystrophic waters, and intermittent streams.

Water Pollution—the introduction into the waters of the state by any means, including dredge-and-fill operations, of any substance in a concentration that tends to degrade the chemical, physical, biological, or radiological integrity of such waters, including, but not limited to, the discharge of brine from salt domes that are located on the coastline of Louisiana and the Gulf of Mexico into any waters off said coastline and extending there from 3 miles into the Gulf of Mexico.

Water Quality Standard—a definite numerical criterion value or general criterion statement or policy statement promulgated by the administrative authority to enhance or maintain water quality and to provide for, and fully protect, the designated uses of the waters of the state.

Waters of the State (or State Waters)—all surface and underground waters and watercourses within the state of Louisiana, whether natural or man-made, including but not limited to, all rivers, streams, lakes, wetlands, and groundwaters, within the confines of the state, and all bordering waters of the Gulf of Mexico.

Wetlands—those areas that have one or more of the following attributes: support hydrophytic (water tolerant) vegetation during most of the year; contain predominately undrained hydric (water saturated) soils; and/or are periodically inundated or saturated by surface water or groundwater.

Whole Effluent Toxicity—the total toxic effect of an effluent measured directly with a toxicity test.

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§1107. Enforcement

A. The standards provided in this Chapter are official regulations of the state, and any person who discharges pollutants into the waters of the state in such quantities as to cause these standards to be violated shall be subject to the enforcement procedures of the state as specified in R.S. 30:2025.

B. Since aquatic systems receive organic and inorganic materials from natural and man-made sources and receive physical inputs from natural and man-made sources, due allowances will be made for situations where low dissolved oxygen concentrations or other water quality conditions attributable to natural sources are at variance with the standards. To allow for such situations, the numerical criteria will not be applied below the 7Q10 or other appropriate critical flow as defined in LAC 33:IX.1115.C.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 10:745 (October 1984), amended LR 15:738 (September 1989), LR 20:883 (August 1994).

§1109. Policy

Water quality standards policies concerned with the protection and enhancement of water quality in the state are discussed in this Section. Policy statements on antidegradation, water use, water body exception categories, compliance schedules and variances, short-term activity authorization, errors, severability, revisions to standards, and sample collection and analytical procedures are described.

A. Antidegradation Policy

1. State policy is that all waters of the state, including interstate, intrastate, and coastal waters, and any portions thereof, whose existing quality exceeds the specifications of the approved water quality standards or otherwise supports an unusual abundance and diversity of fish and wildlife resources, such as waters of national and state parks and refuges, will be maintained at their existing high quality. The state may choose to allow lower water quality in waters that exceed the standards to accommodate justifiable economic and/or social development in the areas in which the waters are located, but not to the extent of violating the established water quality standards. Appropriate use attainability analyses will be required before any lowering of water quality will be allowed. No such changes, however, will be allowed if they interfere with or become injurious to the existing water uses. No lowering of water quality will be

allowed in waters where standards for the designated water uses are not currently being attained.

2. The administrative authority will not approve any wastewater discharge or certify any activity for federal permit that would impair water quality or use of state waters. Waste discharges must comply with applicable state and federal laws for the attainment of water quality goals. Any new, existing, or expanded point source or nonpoint source discharging into state waters, including any land clearing which is the subject of a federal permit application, will be required to provide the necessary level of waste treatment to protect state waters as determined by the administrative authority. Further, the highest statutory and regulatory requirements shall be achieved for all existing point sources and best management practices (BMPs) for nonpoint sources. Additionally, no degradation shall be allowed in high-quality waters that constitute outstanding natural resources, such as waters in the Louisiana Natural and Scenic Rivers System or waters of ecological significance as designated by the department. Those water bodies presently designated as outstanding natural resources are listed in LAC 33:IX.1123.

3. An implementation plan for this antidegradation policy is provided in LAC 33:IX.1119.

B. Water Use

1. It is the policy of the state of Louisiana that all state waters should be protected for recreational uses and for the preservation and propagation of desirable species of aquatic biota and indigenous species of wildlife. Use and value of water for public water supplies, agriculture, industry, and other purposes, as well as navigation, shall also be considered in setting standards. The most stringent criteria specified for each parameter shall be applicable where waters are classified for multiple uses.

2. In applying this policy, the terms *recreational uses* and *desirable species of aquatic biota* will be given common sense applications. Recreational uses will be classified as either *primary contact* or *secondary contact*. *Desirable species of aquatic biota* refers to a diverse and naturally occurring range of aquatic biota and not to species that exist in the area in question in disproportionate numbers as a result of wastewater discharges. Desirable species of fish, shellfish and other invertebrates, wildlife, and other aquatic biota will be specified as *fresh warmwater* or *marine water* species. All future designations of water uses and their associated criteria must, at a minimum, adhere to these classifications, except as provided in LAC 33:IX.1109.B.3 and C.

3. Designated uses which are not existing uses may be removed from water bodies if it is demonstrated through a use attainability analysis and the administrative authority determines that the designated use is not feasible because of one or more of the following reasons:

a. naturally occurring pollutant concentrations prevent the attainment of the use;

b. natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating water conservation requirements to enable uses to be met;

c. human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;

d. dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;

e. physical conditions related to the natural features of the water body, unrelated to water quality, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, preclude attainment of aquatic life protection uses; or

f. controls more stringent than those required by Sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.

C. Water Body Exception Classification. Some water bodies may qualify for a water body exception classification. This classification will be made on a case-by-case basis. Whenever data indicate that a water body exception classification is warranted, the department will recommend the exception to the administrative authority for approval. In all cases where exceptions are proposed, the concurrence of the Water Quality Protection Division Director of the EPA must be obtained and the opportunity for public participation must be provided during the exceptions review process. The general criteria of these standards shall apply to all water bodies classified as a water body exception except where a particular water body is specifically exempted. A use attainability analysis may be conducted to gather data necessary to justify a water body exception classification. If such a classification is justified, applicable water uses and water quality criteria will be established. Exceptions are allowed for the following three categories of water bodies.

1. Intermittent Streams

a. Only those streams which have seasonal no-flow conditions or water levels that preclude primary contact recreation and the propagation of desirable species of fish and wildlife will be considered for classification as intermittent. The general criteria of these standards shall apply to all water bodies classified as intermittent streams except where a particular stream is specifically exempted.

b. An intermittent stream is defined as a water body in which natural conditions of flow, width, and depth preclude primary contact recreational water uses and the propagation of a balanced population of aquatic biota. Because of one or more of these conditions, such streams provide only an ephemeral, aquatic habitat which is not conducive to the establishment of a balanced population of

aquatic biota or to recreational activities. This definition does not include those water bodies that contain enduring pools which support recreational uses and desirable species of aquatic biota, or water bodies which are subject to tidal effects and may contain standing water with no flow during periods of slack tide.

c. For a stream to be considered for classification as intermittent, the stream must lack sufficient drainage area to maintain a perennial flow. The no-flow condition must be natural and not a result of human activities. The no-flow condition of intermittent streams is generally characterized by dry stream reaches and shallow isolated pools during summer dry weather conditions; however, the water body may exhibit flow or contain deeper pools for short periods after rainfall.

d. No stream may be classified as intermittent without the approval of both the administrative authority and the EPA. A use attainability analysis may be conducted to gather additional water body characterization data necessary to justify an intermittent stream classification. If such a classification is justified, seasonal uses and criteria may be established.

e. A wastewater discharge may be proposed into an approved, designated intermittent stream only if the discharge will not by itself or in conjunction with other discharges cause impairment of the applicable designated uses nor cause exceedance of any applicable general and site-specific criteria in the receiving water body, as determined in the exception approval process, nor cause exceedance of any applicable general and site-specific criteria in LAC 33:IX.1113 and 1123 in any water body which receives water from the intermittent stream.

2. Man-Made Water Bodies

a. A man-made water body is defined as a ditch, canal or channelized stream created specifically and used primarily for drainage or conveyance of water. Some natural streams have been channelized to such an extent that conveyance of water is the principal use, usually precluding reasonable primary contact recreation and balanced fish and wildlife propagation. Such natural, channelized streams may be considered for classification as man-made water bodies. The general criteria provided in LAC 33:IX.1113.B shall apply to all water bodies classified as man-made water bodies except where a particular water body is specifically exempted.

b. For a water body to be considered for this excepted water use classification, its principal use must be drainage or conveyance of water. In addition, the water body must not be used as a source of public water supply. Some man-made water bodies that produce new aquatic habitat and subsequently are populated by desirable aquatic species and/or that have some water contact recreational use may, on a case-by-case basis, be considered under this policy. However, the physical characteristics of man-made water bodies that may fall under this exception are not conducive to the establishment of a balanced population of aquatic biota or to the full support of recreational activities.

c. No stream may be classified as man-made without the approval of both the administrative authority and the EPA. A use attainability analysis may be conducted to gather data to justify a man-made water body classification. If the man-made classification is justified, revised water quality criteria and uses, if applicable, will be established.

d. A wastewater discharge may be proposed into an approved, designated man-made water body only if the discharge will not by itself or in conjunction with other discharges cause impairment of the applicable designated uses nor cause exceedance of any applicable general and site-specific criteria in the receiving water body, as determined in the exception approval process, nor cause exceedance of any applicable general and site-specific criteria in LAC 33:IX.1113 and 1123 in any water body which receives water from the man-made water body.

3. Naturally Dystrophic Waters. *Naturally dystrophic waters* are defined in LAC 33:IX.1105. Water bodies shall be designated as *naturally dystrophic waters* and assigned appropriate water quality criteria according to the procedure in the department's current Water Quality Management Plan/Continuing Planning Process.

D. Compliance Schedules and Variances

1. Upon permit issuance, modification, or renewal, compliance schedules may be incorporated into a permit to allow a permittee adequate time to make treatment facility modifications necessary to comply with water quality-based permit limitations determined to be necessary to implement new or revised water quality standards. Compliance shall be achieved at the earliest practicable time. The department will establish interim conditions which may consist of, but are not limited to, compliance schedules, monitoring requirements, temporary limits, and milestone dates so as to measure progress toward final project completion (e.g., design completion, construction start, construction completion, date of compliance).

2. A variance from statewide criteria may be allowed in certain cases where the appropriateness of the criteria is questionable. The variance provides a period of time during which issues concerning the appropriateness of the criteria may be resolved. A variance shall be valid for no more than three years. Any person may request that the department grant a variance. A variance may be granted only after appropriate public participation and EPA review and approval. Variances from criteria will be allowed for anticipated nonattainment of water quality standards due to one or more of the reasons listed in LAC 33:IX.1109.B.3. Other reasons for approval of a variance may be considered on a case-by-case basis.

E. Short-Term Activity Authorization. The administrative authority may exempt from water quality standards certain short-term activities that the state determines are necessary to accommodate activities, emergencies, or to protect the public health and welfare. Such activities shall not cause long-term or permanent impact on designated water uses. These activities may include, but are not limited to, mosquito abatement projects,

algae and weed control projects, and fish eradication projects. No short-term activity authorization shall supersede any applicable state or federal law or regulation including permitting process or the terms or conditions of any permit.

F. Errors. Errors resulting from inadequate or erroneous data and human or clerical errors will be subject to correction by the state, and the discovery of such errors does not render the remaining or unaffected standards invalid.

G. Severability. If any provisions of these standards or the application of any provision of these standards to any person or circumstance is held invalid, the application of such provision to other persons or circumstances and the remainder of the standards shall not be affected thereby.

H. Water Quality Standards Revision Process

1. It is the position of the state of Louisiana that the standards contained herein are those that are reasonable on the basis of the actual or potential quality of the state's waters, present and future water uses, and the best practicable wastewater treatment under any conditions. However, standards are not fixed for all time, but are subject to future revision. The nature of future revisions of these standards will be strongly influenced by many factors. Among these are the following.

a. As a downstream or bordering state in all cases involving interstate streams, Louisiana's standards will be affected by the quality of water received from its upstream and neighboring states.

b. Because it is the state farthest downstream, Louisiana's water quality will be affected by mean low flows when interstate rivers and tributaries become subject to flow regulation and diversion projects.

c. Changes in technology or natural conditions, or the availability of new data, may require a revision of numerical criteria at any time. Such revisions, however, will be accomplished only after proper consideration of designated water uses. Any proposed revision will be consistent with state and federal regulations.

d. Advances in scientific knowledge concerning the toxicity, cancer potency, metabolism, or exposure pathways of toxic pollutants that affect the assumptions on which existing criteria are based may necessitate a revision of numerical criteria at any time. Such revisions, however, will be accomplished only after proper consideration of designated water uses. Any proposed revision will be consistent with state and federal regulations.

2. The state shall hold public hearings at least once every three years to review applicable water quality standards and, as appropriate, modify and adopt standards. The revised standards will be reviewed in accordance with the state Administrative Procedure Act (R.S. 49:950 et seq.) and appropriate EPA procedures.

I. Sample Collection and Analytical Procedures. Procedures for collecting and analyzing samples to be used to determine whether the standards have been attained shall be subject to the following requirements as well as those specified in the department's Quality Assurance (QA) Plan for water monitoring and analysis.

1. Samples will be obtained at a depth or depths representative of the average water quality at the sampling station in question.

2. Samples will be collected from sampling locations as necessary to assess attainment of standards.

3. Collection and preservation of samples will be in accordance with accepted practices as specified in the department's QA Plan.

4. Numerical values of the various parameters will typically be determined by analytical procedures as specified in the QA Plan.

J. Wetlands

1. *Wetlands*, as defined in LAC 33:IX.1105, are a valuable resource to the state of Louisiana. Because of the state's natural low elevations, extensive riverine and riparian environments, and the presence of the Mississippi River delta, Louisiana has a large and diverse amount of wetland habitat. Specific values of Louisiana wetlands include commercial, recreational, and cultural uses. In addition, Louisiana wetlands provide important biological and physiochemical functions that include, but are not limited to, buffering against hurricanes and storms, holding excess floodwaters during high rainfall or high tides, recharging groundwater aquifers used for drinking water and irrigation, and improving water quality by filtering pollutants and taking up nutrients.

2. There are two basic types of Louisiana wetlands: forested wetlands and non-forested, or marsh, wetlands. Forested wetlands include bottomland hardwood swamps, continuously flooded cypress-tupelo swamps, seasonally flooded cypress-tupelo swamps, and oligotrophic seasonally flooded pine forests. Non-forested or marsh wetlands include floating freshwater emergent wetlands, attached freshwater emergent wetlands, brackish marshes, and salt (saline) marshes. Each of these wetland types are defined in LAC 33:IX.1105.

3. Wetlands approved by the administrative authority for wastewater assimilation projects pursuant to the Water Quality Management Plan, Volume 3, Section 10, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, are assigned the following designated uses: secondary contact recreation and fish and wildlife propagation.

4. Applicable Criteria. Wetlands provide several values and functions that necessitate water quality criteria protective primarily of vegetative productivity. Additionally, wetlands can periodically become anoxic or anaerobic, or lack water altogether. Therefore, the following criteria are applicable to wetlands approved by the administrative authority for wastewater assimilation projects pursuant to the Water Quality Management Plan, Volume 3, Section 10, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards.

a. A numerical dissolved oxygen criterion is not necessary to protect the beneficial use of fish and wildlife propagation.

b. The general criteria found in LAC 33:IX.1113.B, except for LAC 33:IX.1113.B.3 and 9, apply.

c. Numerical criteria found in LAC 33:IX.1113.C.4, 5.b, and 6 apply.

d. The biological criteria found in LAC 33:IX.1113.B.12.b apply.

e. Additional or site-specific criteria may be necessary to protect other existing or beneficial uses identified by the administrative authority.

5. A wastewater discharge may be proposed for a wetland of any defined type only if the discharge will not cause impairment of the wetland or exceedance of applicable general or site-specific criteria.

6. Discharges to wetlands approved by the administrative authority for wastewater assimilation projects will only be permitted following procedures pursuant to the Water Quality Management Plan, Volume 3, Section 10, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 10:745 (October 1984), amended LR 15:738 (September 1989), LR 17:264 (March 1991), LR 17:966 (October 1991), LR 20:883 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2546 (November 2000), LR 29:557 (April 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 33:457 (March 2007), LR 33:828 (May 2007).

§1111. Water Use Designations

A. There are seven water uses designated for surface waters in Louisiana: agriculture, drinking water supply, fish and wildlife propagation, outstanding natural resource waters, oyster propagation, primary contact recreation, and secondary contact recreation. Designated uses assigned to a subsegment apply to all water bodies (listed water body and tributaries/distributaries of the listed water body) contained in that subsegment unless unique chemical, physical, and/or biological conditions preclude such uses. However, the designated uses of drinking water supply, outstanding natural resource waters, and/or oyster propagation apply only to the water bodies specifically so designated in LAC 33:IX.1123, Table 3, and not to any tributaries or distributaries to such water bodies. The water use designations are defined as follows.

Agriculture—the use of water for crop spraying, irrigation, livestock watering, poultry operations, and other farm purposes not related to human consumption.

Drinking Water Supply—the use of water for human consumption and general household use. Surface waters designated as drinking water supplies are specifically so designated in LAC 33:IX.1123, Table 3; this designation does not apply to their tributaries or distributaries unless so specified.

Fish and Wildlife Propagation—the use of water for aquatic habitat, food, resting, reproduction, cover, and/or travel corridors for any indigenous wildlife and aquatic life species associated with the aquatic environment. This use also includes the maintenance of water quality at a level that prevents damage to indigenous wildlife and aquatic life species associated with the aquatic environment and contamination of aquatic biota consumed by humans. The use subcategory of *limited aquatic life and wildlife* recognizes the natural variability of aquatic habitats, community requirements, and local environmental conditions. *Limited aquatic life and wildlife* use may be designated for water bodies having habitat that is uniform in structure and morphology, with most of the regionally expected aquatic species absent, low species diversity and richness, and/or a severely imbalanced trophic structure. Aquatic life able to survive and/or propagate in such water bodies includes species tolerant of severe or variable environmental conditions. Water bodies that might qualify for the *limited aquatic life and wildlife* use subcategory include intermittent streams, and naturally dystrophic and man-made water bodies with characteristics including, but not limited to, irreversible hydrologic modification, anthropogenically and irreversibly degraded water quality, uniform channel morphology, lack of channel structure, uniform substrate, lack of riparian structure, and similar characteristics making the available habitat for aquatic life and wildlife suboptimal.

Outstanding Natural Resource Waters—water bodies designated for preservation, protection, reclamation, or enhancement of wilderness, aesthetic qualities, and ecological regimes, such as those designated under the Louisiana Natural and Scenic Rivers System or those designated by the department as waters of ecological significance. Characteristics of *outstanding natural resource waters* include, but are not limited to, highly diverse or unique instream and/or riparian habitat, high species diversity, balanced trophic structure, unique species, or similar qualities. This use designation shall apply only to those water bodies specifically so designated in LAC 33:IX.1123, Table 3 and not to their tributaries or distributaries unless so specified.

Oyster Propagation—the use of water to maintain biological systems that support economically important species of oysters, clams, mussels, or other mollusks so that their productivity is preserved and the health of human consumers of these species is protected. This use designation shall apply only to those water bodies specifically so designated in LAC 33:IX.1123, Table 3 and not to their tributaries or distributaries unless so specified.

Primary Contact Recreation—any recreational or other water contact activity involving prolonged or regular full-body contact with the water and in which the probability of ingesting appreciable amounts of water is considerable. Examples of this type of water use include swimming, skiing, and diving.

Secondary Contact Recreation—any recreational or other water contact activity in which prolonged or regular full-body contact with the water is either incidental or accidental, and the probability of ingesting appreciable amounts of water is minimal. Examples of this type of water use include fishing, wading, and boating.

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§1113. Criteria

A. Introduction

1. Criteria are elements of the water quality which set general and numerical limitations on the permissible amounts of a substance or other characteristics of state waters. General and numerical criteria are established to promote restoration, maintenance, and protection of state waters. Water quality criteria describe stream uses. A criterion for a substance represents the permissible levels for that substance at which water quality will remain sufficient to support a designated use.

2. Quality criteria for the waters of Louisiana are based on their present and potential uses and the existing water quality indicated by data accumulated through monitoring programs of the department and other state and federal agencies as well as universities and private sources. In some cases, available water quality and flow data are not adequate to establish criteria. Criteria in these cases are established on the basis of the best information available from water bodies which are similar in hydrology, water quality, and physical configuration.

3. General and numerical water quality criteria may be modified to take into account site-specific, local conditions. Whenever data acquired from the sources named in LAC 33:IX.1113.A.2 or other sources indicate that criteria should be modified, the department will develop and recommend revised site-specific criteria. The revised criteria will be submitted to the EPA for approval and promulgated in accordance with established procedures including, but not limited to, those in the Louisiana Administrative Procedure Act, R.S. 49:950 et seq.

B. General Criteria. Except where specifically exempted elsewhere in these standards, the general criteria shall apply at all times to the surface waters of the state, including wetlands, whether they are identified in the standards or not. General criteria specifically apply to human activities; they do not apply to naturally occurring conditions.

1. Aesthetics. The waters of the state shall be maintained in an aesthetically attractive condition and shall meet the generally accepted aesthetic qualifications. All waters shall be free from such concentrations of substances attributable to wastewater or other discharges sufficient to:

a. settle to form objectionable deposits;

b. float as debris, scum, oil, or other matter to form nuisances or to negatively impact the aesthetics;

c. result in objectionable color, odor, taste, or turbidity;

d. injure, be toxic, or produce demonstrated adverse physiological or behavioral responses in humans, animals, fish, shellfish, wildlife, or plants; or

e. produce undesirable or nuisance aquatic life.

2. Color. Water color shall not be increased to the extent that it will interfere with present usage or projected future use of the state's water bodies.

a. Waters shall be free from significant increases over natural background color levels.

b. A source of drinking water supply shall not exceed 75 color units on the platinum-cobalt scale.

c. No increases in true or apparent color shall reduce the level of light penetration below that required by desirable indigenous species of aquatic life.

3. Floating, Suspended, and Settleable Solids. There shall be no substances present in concentrations sufficient to produce distinctly visible solids or scum, nor shall there be any formation of long-term bottom deposits of slimes or sludge banks attributable to waste discharges from municipal, industrial, or other sources including agricultural practices, mining, dredging, and the exploration for and production of oil and natural gas. The administrative authority may exempt certain short-term activities permitted under Sections 402 or 404 and certified under Section 401 of the Clean Water Act, such as maintenance dredging of navigable waterways or other short-term activities determined by the state as necessary to accommodate legitimate uses or emergencies or to protect the public health and welfare.

4. Taste and Odor. Taste- and odor- producing substances in the waters of the state shall be limited to concentrations that will not interfere with the production of potable water by conventional water treatment methods or impart unpalatable flavor to food fish, shellfish, and wildlife, or result in offensive odors arising from the waters, or otherwise interfere with the designated water uses.

5. Toxic Substances. No substances shall be present in the waters of the state or the sediments underlying said waters in quantities that alone or in combination will be toxic to human, plant, or animal life or significantly increase health risks due to exposure to the substances or consumption of contaminated fish or other aquatic life. The numerical criteria (LAC 33:IX.1113.C.6) specify allowable concentrations in water for several individual toxic substances to provide protection from the toxic effects of these substances. Requirements for the protection from the toxic effects of other toxic substances not included in the

numerical criteria and required under the general criteria are described in LAC 33:IX.1121.

6. Oil and Grease. Free or floating oil or grease shall not be present in quantities large enough to interfere with the designated water uses, nor shall emulsified oils be present in quantities large enough to interfere with the designated uses.

7. Foaming or Frothing Materials. Foaming or frothing materials of a persistent nature are not permitted.

8. Nutrients. The naturally occurring range of nitrogen-phosphorous ratios shall be maintained. This range shall not apply to designated intermittent streams. To establish the appropriate range of ratios and compensate for natural seasonal fluctuations, the administrative authority will use site-specific studies to establish limits for nutrients. Nutrient concentrations that produce aquatic growth to the extent that it creates a public nuisance or interferes with designated water uses shall not be added to any surface waters.

9. Turbidity

a. Turbidity other than that of natural origin shall not cause substantial visual contrast with the natural appearance of the waters of the state or impair any designated water use. Turbidity shall not significantly exceed background; background is defined as the natural condition of the water. Determination of background will be on a case-by-case basis.

b. As a guideline, maximum turbidity levels, expressed as nephelometric turbidity units (NTU), are established and shall apply for the following named water bodies and major aquatic habitat types of the state:

i. Red, Mermentau, Atchafalaya, Mississippi, and Vermilion Rivers and Bayou Teche—150 NTU;

ii. estuarine lakes, bays, bayous, and canals—50 NTU;

iii. Amite, Pearl, Ouachita, Sabine, Calcasieu, Tangipahoa, Tickfaw, and Tchefuncte rivers—50 NTU;

iv. freshwater lakes, reservoirs, and oxbows—25 NTU;

v. designated scenic streams and outstanding natural resource waters not specifically listed in Clauses B.9.b.i-iv of this Section—25 NTU; and

vi. for other state waters not included in Clauses B.9.b.i-v of this Section, and in water body segments where natural background turbidity exceeds the values specified in these clauses, turbidity in NTU caused by any discharges shall be restricted to the appropriate background value plus 10 percent. This shall not apply to designated intermittent streams.

c. The administrative authority may exempt for short periods certain activities permitted under Sections 402 or 404 and certified under Section 401 of the Clean Water Act, such as maintenance dredging of navigable waterways or other short-term activities that the state determines are necessary to accommodate legitimate uses or emergencies or to protect the public health and welfare.

10. Flow. The natural flow of state waters shall not be altered to such an extent that the basic character and water quality of the ecosystem are adversely affected except in situations where alterations are necessary to protect human life or property. If alterations to the natural flow are deemed necessary, all reasonable steps shall be taken to minimize the adverse impacts of such alterations. Additionally, all reasonable steps shall be taken to mitigate the adverse impacts of unavoidable alterations.

11. Radioactive Materials. Radioactive materials in the surface waters of the state designated for drinking water supply use shall not exceed levels established pursuant to the Federal Safe Drinking Water Act (P.L. 93-523 et seq.).

12. Biological and Aquatic Community Integrity

a. The biological and community structure and function in state waters shall be maintained, protected, and restored except where not attainable and feasible as defined in LAC 33:IX.1109. This is the ideal condition of the aquatic community inhabiting the unimpaired water bodies of a specified habitat and region as measured by community structure and function. The biological integrity will be guided by the fish and wildlife propagation use designated for that particular water body. Fish and wildlife propagation uses are defined in LAC 33:IX.1111.C. The condition of these aquatic communities shall be determined from the measures of physical, chemical, and biological characteristics of each surface water body type, according to its designated use (LAC 33:IX.1123). Reference site conditions will represent naturally attainable conditions. These sites should be the least impacted and most representative of water body types. Such reference sites or segments of water bodies shall be those observed to support the greatest variety and abundance of aquatic life in the region as is expected to be or has been recorded during past surveys in natural settings essentially undisturbed by human impacts, development, or discharges. This condition shall be determined by consistent sampling and reliable measures of selected, indicative communities of animals (i.e., fish, invertebrates, etc.) and/or plants as established by the department and may be used in conjunction with acceptable chemical, physical, and microbial water quality measurements and records as deemed appropriate for this purpose.

b. Assessment of Biological Integrity for Wetlands Approved for Wastewater Assimilation Projects Pursuant to the Water Quality Management Plan, Volume 3, Section 10, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards. Wetland biological integrity will be guided by above-ground wetland vegetative productivity with consideration given to floral diversity. Due to effluent addition, the discharge area of a wetland shall have no more than a 20 percent reduction in the rate of total above-ground wetland productivity over a five-year period as compared to a reference area. The *discharge area* is the area of a wetland directly affected by effluent addition. For

each location, the discharge area will be defined by the volume of discharge. The *reference area* is the wetland area that is nearby and similar to the discharge area but that is not affected by effluent addition. Above-ground productivity is a key measurement of overall ecosystem health in the wetlands of south Louisiana. Primary productivity is dependent on a number of factors, and the methods for measurement of above-ground productivity and floral diversity are found in the current Water Quality Management Plan, Volume 3, Section 10, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards.

13. Other Substances and Characteristics. General criteria on other substances and characteristics not specified in this Subsection will be developed as needed.

C. Numerical Criteria. Numerical criteria identified in LAC 33:IX.1123, Table 3, apply to the specified water bodies, and to their tributaries, distributaries, and interconnected streams and water bodies contained in the water management subsegment if they are not specifically named therein, unless unique chemical, physical, and/or biological conditions preclude the attainment of the criteria. In those cases, natural background levels of these conditions may be used to establish site-specific water quality criteria. Those water bodies officially approved and designated by the state and EPA as intermittent streams, man-made water bodies, or naturally dystrophic waters may be excluded from some or all numerical criteria as stated in LAC 33:IX.1109. Although naturally occurring variations in water quality may exceed criteria, water quality conditions attributed to human activities must not exceed criteria when flows are greater than or at critical conditions (as defined in LAC 33:IX.1115.C).

1. pH. The pH shall fall within the range of 6.0 to 9.0 unless natural conditions exceed this range or where otherwise specified in the table (LAC 33:IX.1123). No discharge of wastes shall cause the pH of a water body to vary by more than one pH unit within the specified pH range for the subsegment where the discharge occurs.

2. Chlorides, Sulfates, and Total Dissolved Solids. Numerical criteria for these parameters generally represent the arithmetic mean of existing data from the nearest sampling location plus three standard deviations. For estuarine and coastal marine waters subsegments in Table 3 that have no listed criteria (i.e., designated N/A), criteria will be established on a case-by-case basis using field determination of ambient conditions and the designated uses. For water bodies not specifically listed in the Numerical Criteria and Designated Table, increases over background levels of chlorides, sulfates, and total dissolved solids may be permitted. Such increases will be permitted at the discretion of the department on a case-by-case basis and shall not cause in-stream concentrations to exceed 250, 250, and 500 mg/L for chlorides, sulfates, and total dissolved solids, respectively, except where a use attainability analysis indicates that higher levels will not affect the designated uses. In permitting such increases, the department shall consider their potential effects on resident biota and downstream water bodies in addition to the background conditions. Under no circumstances shall an allowed increase over background conditions cause any numerical criteria to be exceeded in any listed water body or any other general or numerical criteria to be exceeded in either listed or unlisted water bodies.

3. Dissolved Oxygen. The statewide dissolved oxygen (DO) values represent minimum criteria for the types of water specified. (That is, a level below the criterion, as opposed to above the criterion, may indicate potential impairment.) These DO criteria are designed to protect indigenous wildlife and aquatic life species associated with the aquatic environment and shall apply except in those water bodies that have ecoregional-specific or site-specific criteria, or where exempted or excluded elsewhere in these standards. DO criteria for specific state water bodies are contained in LAC 33:IX.1123. Naturally occurring variations below the criterion specified may occur for short periods (for a few hours each day). These variations reflect such natural phenomena as the reduction in photosynthetic activity and oxygen production by plants during hours of darkness. However, no waste discharge or human activity shall lower the DO concentration below the specified minimum.

a. Fresh Water. For fresh water, the DO criterion is 5 mg/L. *Fresh warmwater biota* is defined in LAC 33:IX.1105.

b. Estuarine Waters. For estuarine waters, the DO criterion is 4 mg/L.

c. Coastal Marine Waters (Including Nearshore Gulf of Mexico). For coastal marine waters, the DO criterion is 5 mg/L.

4. Temperature

a. The temperature criteria enumerated in the tables in most cases represent maximum values obtained from existing data. In a few cases, however, a limited number of unusually high temperatures in the range of 35° to 36°C (95-97°F) have been deleted because these values are believed to have been recorded during conditions of unseasonably high temperatures and/or unusually low flows or water levels and therefore do not represent normal maximum temperatures.

b. The criterion consists of two parts, a temperature differential and a maximum temperature. The temperature differential represents the maximum permissible increase above ambient conditions after mixing. No additional process heat shall be added once the ambient temperature reaches the maximum temperature specified in the standards, except under natural conditions such as unusually hot, dry weather, as provided for in LAC 33:IX.1113.C.4.b.i-ii.

i. Fresh Water. The following temperature standards apply to fresh water:

(a). maximum of 2.8°C (5°F) rise above ambient for streams and rivers;

(b). maximum of 1.7°C (3°F) rise above ambient for lakes and reservoirs; and

(c). maximum temperature of 32.2°C (90°F), except where otherwise listed in the tables. Maximum temperature may be varied on a case-by-case basis to allow for the effects of natural conditions such as unusually hot and/or dry weather.

ii. Estuarine and Coastal Waters. The following temperature standards apply to estuarine and coastal waters:

(a). maximum of 2.2°C (4°F) rise above ambient from October through May;

(b). maximum of 1.1°C (2°F) rise above ambient from June through September; and

(c). maximum temperature of 35°C (95°F), except when natural conditions elevate temperature above this level.

c. These temperature criteria shall not apply to privately owned reservoirs or to reservoirs constructed solely for industrial cooling purposes.

5. Bacteria. The applicability of bacterial criteria to a particular stream subsegment depends upon the use designation of that individual stream subsegment. Criteria are established to protect water quality commensurate with the most stringent designated use assigned to the subsegment. Applicable bacterial criteria for the most stringent designated use of each individual Louisiana stream subsegment are listed in the "BAC" column of Table 3, LAC 33:IX.1123. For water quality monitoring and assessment purposes the following criteria shall be used to determine support for the designated uses.

a. Primary Contact Recreation. No more than 25 percent of the total samples collected on a monthly or near-monthly basis shall exceed a fecal coliform density of 400/100 mL. This primary contact recreation criterion shall apply only during the defined recreational period of May 1 through October 31. During the nonrecreational period of November 1 through April 30, the criteria for secondary contact recreation shall apply.

b. Secondary Contact Recreation. No more than 25 percent of the total samples collected on a monthly or near-monthly basis shall exceed a fecal coliform density of 2,000/100 mL. This secondary contact recreation criterion shall apply year round.

c. Drinking Water Supply. No more than 30 percent of the total samples collected on a monthly or near-monthly basis shall exceed a fecal coliform density of 2,000/100 mL.

d. Oyster Propagation. The fecal coliform median most probable number (MPN) shall not exceed 14 fecal coliforms per 100 mL, and not more than 10 percent of the samples shall exceed an MPN of 43 per 100 mL for a five-tube decimal dilution test in those portions of the area most probably exposed to fecal contamination during the most unfavorable hydrographic and pollution conditions.

6. Toxic Substances. Numerical criteria for specific toxic substances are listed in Table 1.

a. Numerical criteria for specific toxic substances are mostly derived from the following publications of the Environmental Protection Agency: Water Quality Criteria, 1972 (commonly referred to as the "Blue Book"; Quality Criteria for Water, 1976 (commonly referred to as the "Red Book"; Ambient Water Quality Criteria, 1980 (EPA 440/5-80); Ambient Water Quality Criteria, 1984 (EPA 440/5-84-85); and Quality Criteria for Water, 1986—with updates (commonly referred to as the "Gold Book"). Natural background conditions, however, are also considered. These toxic substances are selected for criteria development because of their known or suspected occurrence in Louisiana waters and potential threat to attainment of designated water uses.

b. The criteria for protection of aquatic life are based on acute and chronic concentrations in fresh and marine waters (see LAC 33:IX.1105) as specified in the EPA criteria documents and are developed primarily for attainment of the fish and wildlife propagation use. Where a specific numerical criterion is not derived in EPA criteria documents, a criterion is developed by applying an appropriate application factor for acute and chronic effects to the lowest LC50 value for a representative Louisiana species. The application of either freshwater toxics criteria or marine toxics criteria in brackish waters will be determined by the average salinity of the water body (see LAC 33:IX.1105). In cases where the average salinity is 2 parts per thousand or greater and less than 10 parts per thousand, the more stringent criteria will be used unless an alternative site-specific criterion is developed (as described in EPA-822-R-02-047, November 2002).

c. Criteria for human health are derived using EPA guidelines, procedures, and equations for water bodies used as drinking water supplies and those not used as drinking water supplies. Criteria applied to water bodies designated as drinking water supplies are developed to protect that water supply for human consumption, including protection against taste and odor effects, to protect it for primary and secondary contact recreation, and to prevent contamination of fish and aquatic life consumed by humans. Criteria for water bodies not designated as drinking water supplies are developed to protect them for primary and secondary contact recreation and to prevent contamination of fish and aquatic life consumed by humans. In some cases, the maximum contaminant levels (MCLs) from the National Drinking Water Regulations, when more restrictive, are used as the criteria. For those toxic substances that are suspected or proven carcinogens, an incremental cancer risk level of 10^{-6} (1 in 1,000,000) is used in deriving criteria, with the exception of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) and hexachlorocyclohexane (lindane, gamma BHC), in which case 10^{-5} (1 in 100,000) is used to derive the criteria.

d. Metals criteria are based on dissolved metals concentrations in ambient waters. Hardness values are averaged from two-year data compilations contained in the

latest Louisiana Water Quality Data Summary or other comparable data compilations or reports. Metals criteria have been developed for both fresh and marine waters, but not brackish waters. The application of either freshwater metals criteria or marine metals criteria in brackish waters will be determined by the average salinity of the water body (see LAC 33:IX.1105). In cases where the average salinity is 2 parts per thousand or greater and less than 10 parts per thousand, the more stringent criteria will be used unless an alternative site-specific criterion is developed (as described in EPA-822-R-02-047, November 2002).

e. For purposes of criteria assessment, the most stringent criteria for each toxic substance will apply. For determination of criteria attainment in ambient water where the criteria are below the detection limit, then no detectable concentrations will be allowed. However, for dilution calculations or water quality modeling used to develop total maximum daily load and wasteload allocations, the assigned criteria, even if below the detection limit, will be used.

f. The use of clean techniques may be required to definitively assess ambient levels of some pollutants (e.g., EPA Method 1669 for metals) or to assess such pollutants when numeric or narrative water quality standards are not being attained. *Clean techniques* are defined in LAC 33:IX.1105.

Table 1
Numerical Criteria for Specific Toxic Substances
[In micrograms per liter (µg/L)]

Toxic Substance	Aquatic Life Protection						Human Health Protection	
	Freshwater		Marine Water		Brackish Water		Drinking Water Supply[1]	Non-Drinking Water Supply[2]
	Acute	Chronic	Acute	Chronic	Acute	Chronic		
Aldrin	3.00	--	1.300	--	1.300	--	$4x10^{-5}$	$4x10^{-5}$
Benzene	2,249	1,125	2,700	1,350	2,249	1,125	0.58	6.59
Benzidine	250	125	--	--	250	125	$8x10^{-5}$	$1.7x10^{-4}$
Bromodichloromethane	--	--	--	--	--	--	0.52	6.884
Bromoform (Tribromomethane)	2,930	1,465	1,790	895	1790	895	3.9	34.7
Carbon Tetrachloride (Tetrachloromethane)	2,730	1,365	15,000	7,500	2,730	1,365	0.22	1.2
Chlordane	2.40	0.0043	0.090	0.0040	.090	0.0040	$1.9x10^{-4}$	$1.9x10^{-4}$
Chloroform (Trichloromethane)	2,890	1,445	8,150	4,075	2,890	1,445	5.3	70
2-Chlorophenol	258	129	--	--	258	129	0.10	126.4
3-Chlorophenol	--	--	--	--	--	--	0.10	--
4-Chlorophenol	383	192	535	268	383	192	0.10	--
Cyanide	45.9	5.4	1.0	--	1.0	--	663.8	12,844
DDE	52.5	10.5000	0.700	0.1400	0.700	0.1400	$1.9x10^{-4}$	$1.9x10^{-4}$
DDT	1.10	0.0010	0.130	0.0010	0.130	0.0010	$1.9x10^{-4}$	$1.9x10^{-4}$
Dibromochloromethane	--	--	--	--	--	--	0.39	5.08
1,2-Dichloroethane (EDC)	11,800	5,900	11,300	5,650	11,300	5,650	0.36	6.8
1,1-Dichloroethylene	1,160	580	22,400	11,200	1,160	580	0.05	0.58
2,4-Dichlorophenoxyacetic acid (2,4-D)	--	--	--	--	--	--	100.00	--
2,3-Dichlorophenol	--	--	--	--	--	--	0.04	--
2,4-Dichlorophenol	202	101	--	--	202	101	0.30	232.6
2,5-Dichlorophenol	--	--	--	--	--	--	0.50	--
2,6-Dichlorophenol	--	--	--	--	--	--	0.20	--
3,4-Dichlorophenol	--	--	--	--	--	--	0.30	--
1,-3-Dichloropropene	606	303	79	39.5	79	39.5	0.33	5.51
Dieldrin	0.2374	0.0557	0.710	0.0019	0.2374	0.0019	$5x10^{-5}$	$5x10^{-5}$
Endosulfan	0.22	0.0560	0.034	0.0087	0.034	0.0087	0.47	0.64
Endrin	0.0864	0.0375	0.037	0.0023	0.037	0.0023	0.26	0.26
Ethylbenzene	3,200	1,600	8,760	4,380	3,200	1,600	247	834
Heptachlor	0.52	0.0038	0.053	0.0036	0.053	0.0036	$7x10^{-5}$	$7x10^{-5}$
Hexachlorobenzene	--	--	--	--	--	--	$2.5x10^{-4}$	$2.5x10^{-4}$
Hexachlorobutadiene[3]	5.1	1.02	1.6	0.32	1.6	0.32	0.09	0.11
Hexachlorocyclohexane (gamma BHC; Lindane)	5.30	0.21	0.160	--	0.160	--	0.11	0.20
Methyl chloride (Chloromethane)	55,000	27,500	27,000	13,500	27,000	13,500	--	--
Methylene chloride (Dichloromethane)	19,300	9,650	25,600	12,800	19,300	9,650	4.4	87
Phenol (Total)[4]	700	350	580	290	580	290	5.00	50.0
Polychlorinated Biphenyls, Total (PCBs)	2.00	0.0140	10.000	0.0300	2.00	0.0140	$5.59x10^{-5}$	$5.61x10^{-5}$
TDE (DDD)	0.03	0.0060	1.250	0.2500	0.03	0.0060	$2.7x10^{-4}$	$2.7x10^{-4}$
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)[5]	--	--	--	--	--	--	$0.71x10^{-6}$	$0.72x10^{-6}$
1,1,2,2-Tetrachloroethane	932	466	902	451	902	451	0.16	1.8
Tetrachloroethylene	1,290	645	1,020	510	1020	510	0.65	2.5
Toluene	1,270	635	950	475	950	475	6,100	46,200
Toxaphene	0.73	0.0002	0.210	0.0002	0.210	0.0002	$2.4x10^{-4}$	$2.4x10^{-4}$
1,1,1-Trichloroethane	5,280	2,640	3,120	1,560	3,120	1,560	200.0	--
1,1,2-Trichloroethane	1,800	900	--	--	1,800	900	0.56	6.9
Trichloroethylene	3,900	1,950	200	100	200	100	2.8	21
2-(2,4,5-Trichlorophenoxy) propionic acid (2,4,5-TP; Silvex)	--	--	--	--	--	--	10.00	--
Vinyl Chloride (Chloroethylene)	--	--	--	--	--	--	$2.37x10^{-2}$	0.45

[1] Applies to surface water bodies designated as a Drinking Water Supply and also protects for primary and secondary contact recreation and fish consumption.

[2] Applies to surface water bodies not designated as a Drinking Water Supply and protects for primary and secondary contact recreation and fish consumption.

[3] Includes Hexachloro-1,3-butadiene.

[4] Total phenol as measured by the 4-aminoantipyrine (4AAP) method.

[5] Advances in scientific knowledge concerning the toxicity, cancer potency, metabolism, or exposure pathways of toxic pollutants that affect the assumptions on which existing criteria are based may necessitate a revision of dioxin numerical criteria at any time. Such revisions, however, will be accomplished only after proper consideration of designated water uses. Any proposed revision will be consistent with state and federal regulations.

Table 1A
Numerical Criteria for Metals and Inorganics
[In micrograms per liter (μg/L) or parts per billion (ppb)]

Toxic Substance	Aquatic Life Protection						Human Health Protection
	Freshwater		Marine Water		Brackish Water[f]		Drinking Water Supply[a]
	Acute	Chronic	Acute	Chronic	Acute	Chronic	
Arsenic[c]	339.8	150	69.00	36.00	69	36	10.0
Chromium III (Tri)[b,c]	**Acute:** $e^{(0.8190[\ln(hardness)] + 3.6880)} \times 0.316$ **Chronic:** $e^{(0.8190[\ln(hardness)] + 1.5610)} \times 0.86$		515.00	103.00	*	*	50.0
Chromium VI (Hex)[c]	16	11	1,100	50.00	16	11	50.0
Zinc[b,c]	**Acute:** $e^{(0.8473[\ln(hardness)] + 0.8604)} \times 0.978$ **Chronic:** $e^{(0.8473[\ln(hardness)] + 0.7614)} \times 0.986$		90	81	*	*	5,000
Cadmium[b,c]	**Acute:** $e^{(1.1280[\ln(hardness)] - 1.6774)} \times (1.136672-[\ln(hardness)(0.041838)])$ **Chronic:** $e^{(0.7852[\ln(hardness)] - 3.4900)} \times (1.101672-[\ln(hardness)(0.041838)])$		45.35	10.00	*	*	10.0
Copper[b,c]	**Acute:** $e^{(0.9422[\ln(hardness)] - 1.3844)} \times 0.960$ **Chronic:** $e^{(0.8545[\ln(hardness)] - 1.3860)} \times 0.960$		3.63	3.63	*	*	1000
Lead[b,c]	**Acute:** $e^{(1.2730[\ln(hardness)] - 1.4600)} \times (1.46203-[\ln(hardness)(0.145712)])$ **Chronic:** $e^{(1.2730[\ln(hardness)] - 4.7050)} \times (1.46203-[\ln(hardness)(0.145712)])$		209	8.08	*	*	50.0
Mercury[c]	2.04[d]	0.012[e]	2[d]	0.025[e]	2[d]	0.012[e]	2.0
Nickel[b,c]	**Acute:** $e^{(0.8460[\ln(hardness)] + 3.3612)} \times 0.998$ **Chronic:** $e^{(0.8460[\ln(hardness)] + 1.1645)} \times 0.997$		74	8.2	*	*	--

* For hardness-dependent criteria, values are calculated using average hardness (mg/L $CaCO_3$) from two-year data compilations contained in the latest Louisiana Water Quality Data Summary or other comparable data compilations or reports, as described in LAC 33:IX.1113.C.6.

[a] Applies to surface water bodies designated as Drinking Water Supply and also protects for primary and secondary contact recreation and fish consumption.

[b] Hardness-dependent criteria for freshwater are based on the natural logarithm formulas multiplied by conversion factors (CF) for acute and chronic protection. The minimum and maximum hardness values used for criteria calculation are 25 mg/L and 400 mg/L $CaCO_3$, as specified in 40 CFR 131.36.

[c] Freshwater and saltwater metals criteria are expressed in terms of the dissolved metal in the water column. The standard was calculated by multiplying the previous water quality criteria by a conversion factor (CF). The CF represents the EPA-recommended conversion factors found in EPA-822-R-02-047, November 2002.

[d] Conversion factor is from: Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, October 1, 1993. Factors were expressed to two decimal places.

[e] It is not appropriate to apply CF to chronic value for mercury because it is based on mercury residues in aquatic organisms rather than toxicity.

[f] According to LAC 33:IX.1113.C.6.d, the most stringent criteria (freshwater or marine) will be used.

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§1115. Application of Standards

A. Background

1. Water quality standards set forth in this Chapter specify concentration limits and other water quality characteristics which, if not exceeded, are expected to result in an aquatic ecosystem suitable for the highest designated uses given. These concentration limits and characteristics (criteria) are derived for individual water segments on the

basis of the designated use or uses of the segment and the natural qualities of the waters.

2. An established water quality value (criterion) represents the general or numerical concentration limit or characteristic of a constituent in a water body segment that is allowed by the state. For some toxic substances, however, criteria provide both acute and chronic limits for the protection of aquatic life in fresh and marine waters, and separate limits for the protection of human health. Criteria apply at all times, except where natural conditions cause them to be exceeded or where specific exemptions in the standards apply. Water uses, pollution sources, natural conditions, and the water quality criteria are all considered in the department's determination of appropriate permit limits for each wastewater discharge to a water body.

3. The difference between an ambient concentration and a water quality criterion value should not be construed as the amount of a constituent that can be discharged. The antidegradation statement requires that all waters which exceed the water quality standards be maintained at their existing high quality, which can be lowered only after appropriate economic and or social justification has been shown. More stringent requirements apply to those waters designated as outstanding natural resource waters.

B. Flow Conditions. Except where indicated elsewhere in this Chapter, the water quality standards specified herein shall apply during all flow conditions greater than the critical flows defined in LAC 33:IX.1115.C. (See LAC 33:IX.1107 and intermittent streams exception category, LAC 33:IX.1109.C.1.)

C. Mixing, Mixing Zone, and Flow Application

1. Mixing zones are those portions of water bodies where effluent waters are dispersed into receiving waters. These are areas where effluents and receiving waters mix and not areas where effluents are treated. Mixing zones are not considered a part of the wastewater treatment process. Mixing must be accomplished as quickly as possible to ensure that the waste is mixed in the smallest practicable area. Outfall structures should be designed to minimize mixing zone size. Mixing zones and fractions of flow apply only to aquatic life criteria. Human health criteria are to be met below the point of discharge after complete mixing.

2. Mixing zones are exempted from general and numerical criteria as specified in LAC 33:IX.1113, except as required in Paragraph C.5 of this Section. The waters outside of mixing zones must meet all the standards for that particular body of water. For toxic substances, this requires meeting chronic aquatic life criteria beginning at the edge of the mixing zone.

3. For aquatic life criteria, small zones of initial dilution will be allowed at each discharge site within a mixing zone. Numeric mixing zones and other receiving water criteria, including both aquatic life acute and chronic water quality criteria, will not apply in these zones of initial dilution. Zones of initial dilution are, however, restricted to the immediate point of discharge and are substantially smaller than the designated mixing zone. They shall not exceed 10 percent of the size of the mixing zone unless conditions specified in Paragraph C.13 of this Section are met. Numeric acute aquatic life criteria apply beginning at the edge of the zone of initial dilution.

4. A mixing zone shall not be allowed to adversely impact a nursery area for aquatic life species, habitat for waterfowl or indigenous wildlife associated with the aquatic environment except as provided in Paragraphs C.2 and 3 of this Section, or any area approved by the state for oyster propagation. Mixing and mixing zones shall not include an existing drinking water supply intake if they would significantly impair the drinking water intake.

5. Mixing zones must be free of the following:

a. floating debris, oil, scum, and other material in concentrations that constitute a nuisance or negatively impact the aesthetics;

b. substances in concentrations which produce undesirable or nuisance aquatic life; and

c. materials in concentrations that will cause acute toxicity to aquatic life. Acute toxicity refers to aquatic life lethality or other deleterious effects caused by the passage through a mixing zone of migrating fish moving up or downstream, or by the passage through a mixing zone of less mobile forms such as zooplankton that drift through the mixing zone. Numerical acute criteria or other acute quantitative limits for toxic substances will be applied in the mixing zone to protect aquatic life from acute toxicity.

6. Applicable limits of mixing zones shall include, but may not be limited to, the linear distances from point source discharges, surface area involvement, and volume of receiving water, and shall take into account other nearby mixing zones. A mixing zone shall not overlap another mixing zone in such a manner, or be so large, as to impair any designated water use in the receiving water body when the water body is considered as a whole.

7. For the application of aquatic life criteria, state water bodies are separated into seven categories as described in Table 2a, and for the application of human health criteria, state water bodies are separated into six categories as described in Table 2b. Mixing zones apply to the implementation of chronic aquatic life criteria, and zones of initial dilution apply to the implementation of acute aquatic life criteria.

a. Chronic aquatic life criteria apply outside the mixing zone, beginning at the edge. The 7Q10 is specified in Table 2a with the intention of limiting 7-day average concentration exceedances to no more than once every 10 years.

b. In perennial, flowing streams (Table 2b, Categories 1 and 2), harmonic mean flow is specified for human health protection against carcinogens, and the 7Q10 is specified for human health protection against non-carcinogens.

c. These specified flows will not be appropriate under some circumstances, and alternative formulations will be required to determine appropriate effluent limitations for equivalent protection of human health and aquatic life uses of the stream. These exceptions may include, but are not limited to, seasonally variable effluent discharge rates, hold and release treatment systems, and effluent dominated sites. The department may approve an alternative which is protective of designated uses, to be determined on a case-by-case basis.

8. For chloride, sulfate, and total dissolved solids, criteria are to be met below the point of discharge after complete mixing. Because criteria are developed over a long-term period, harmonic mean flow will be applied for mixing.

9. Dilution at the edge of the mixing zone and at the edge of the zone of initial dilution for water body categories 5, 6, and 7 (Table 2a) will be determined on a case-by-case basis.

10. Mixing zones shall not preclude the occurrence of continuous water routes of the volume, area, and quality necessary to allow passage of free-swimming and drifting fish and aquatic life with no significant effects on their populations.

11. In those cases, such as wetlands, where unique site-specific conditions or other considerations preclude the application of specific mixing zone requirements, the department may specify definable, geometric limits for mixing zones.

12. In those cases where unique site-specific conditions preclude the application of the flow requirements for Category 2 water bodies as stated in Tables 2a and 2b, the department may on a case-by-case basis approve an alternative flow when determining 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) permitted effluent concentrations. Any flow specifications shall be protective of designated uses.

13. In cases for which a diffuser has been approved or required for use with a wastewater discharge, the department may increase the dilution allowed for the application of acute aquatic life criteria at the edge of the zone of initial dilution. The dilution allowed will be determined by the department after consideration of receiving water body characteristics and diffuser capabilities. No increase in dilution will be allowed at the edge of the mixing zone for the application of chronic aquatic life criteria. Physical constraints of a particular water body may preclude the approval and use of a diffuser. The following conditions must be met with the use of a diffuser:

a. the diffused discharge velocity must be sufficient to provide adequate mixing such that acutely toxic conditions are minimized;

b. the diffused discharge must not adversely impact nursery areas for aquatic life species or indigenous wildlife associated with the aquatic environment except as provided in Paragraphs C.2 and 3 of this Section, propagation areas, zones of passage for aquatic life (see Paragraph C.10 of this Section), wildlife uses, recreational uses, or drinking water supply intakes;

c. the diffused discharge must not cause erosion or scour of the water body banks or bottom;

d. the diffused discharge must be submerged and located in areas with sufficient depth available so that surface water uses of the receiving water are not impaired and the design mixing capabilities of the diffuser are achieved;

e. diffused discharges must not be located in areas where the diffuser may be damaged or impaired by scouring, deposition, or periodic dredging; and

f. diffused discharges must not be located in areas where eddies or whirlpools can cause buildup of effluent concentrations by obstructing or trapping the discharge jet flow.

Table 2a. Water Body Categorization for the Determination of Appropriate Dilution and Mixing Zone Application for Aquatic Life

CATG	Description	Aquatic Life		
		Flow	Fraction of Flow or Radial Distance (feet)	
			ZID[a]	MZ[b]
1	Streams with 7Q10 flow greater than 100 cfs[c]	7Q10	10 cfs or 1/30 of the flow, whichever is greater	100 cfs or 1/3 of the flow, whichever is greater
2	Streams with 7Q10 flow less than or equal to 100 cfs	7Q10	1/10	1
3	Tidal channels with flows greater than 100 cfs	1/3 of the average or typical flow averaged over one tidal cycle irrespective of flow direction	10 cfs or 1/30 of the flow, whichever is greater	100 cfs or 1/3 of the flow, whichever is greater
4	Tidal channels with flows less than or equal to 100 cfs	1/3 of the average or typical flow averaged over one tidal cycle irrespective of flow direction	1/10	1
5	Freshwater lakes and ponds	Not Applicable	25 feet	100 feet
6	Coastal bays and lakes	Not Applicable	50 feet	200 feet

Table 2a. Water Body Categorization for the Determination of Appropriate Dilution and Mixing Zone Application for Aquatic Life				
CATG	Description	Aquatic Life		
		Flow	Fraction of Flow or Radial Distance (feet)	
			ZID[a]	MZ[b]
7	Gulf of Mexico	Not Applicable	100 feet	400 feet

[a]ZID = zone of initial dilution
[b]MZ = mixing zone
[c]cfs = cubic feet per second

Table 2b. Water Body Categorization for the Determination of Flow for Human Health			
CATG	Description	Human Health	
		Flow	
		Noncarcinogens	Carcinogens
1	Streams with 7Q10 flow greater than 100 cfs	7Q10	Harmonic Mean
2	Streams with 7Q10 flow less than or equal to 100 cfs	7Q10	Harmonic Mean
3	Tidal channel	The average or typical flow averaged over one tidal cycle irrespective of flow direction	
4	Freshwater lakes and ponds	Not Applicable	Not Applicable
5	Coastal bays and lakes	Not Applicable	Not Applicable
6	Gulf of Mexico	Not Applicable	Not Applicable

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§1117. References

A. The following references were used in developing LAC 33:IX.1101-1115 or are referred to in those Sections:

1. Chabreck, R.H., and R.G. Linscombe. 1978. Vegetative Type Map of the Louisiana Coastal Marshes. New Orleans: Louisiana Department of Wildlife and Fisheries.

2. Louisiana Department of Environmental Quality. (continuous). Fixed Station Long-Term Ambient Surface Water Quality Network. Baton Rouge: Office of Environmental Compliance.

3. National Academy of Sciences, National Academy of Engineering. 1974. Water Quality Criteria, 1972. Environmental Protection Agency, Ecological Research Series, EPA R3.73:033. Washington, D.C.: U.S. Government Printing Office.

4. U.S. Environmental Protection Agency. 1976. Quality Criteria for Water. Washington, D.C.: EPA.

5. U.S. Environmental Protection Agency. 1983. Water Quality Standards Handbook. WH-585. Washington, D.C.: Office of Water Regulations and Standards, EPA.

6. U.S. Environmental Protection Agency. 1983. Technical Support Manual: Waterbody Surveys and Assessments for Conducting Use Attainability Analyses. WH-585. Washington, D.C.: Office of Water Regulations and Standards, EPA.

7. U.S. Environmental Protection Agency. 1986. Quality Criteria for Water: 1986. EPA Series No. 440/5-86-001. Washington, D.C.: U.S. Government Printing Office.

8. U.S. Environmental Protection Agency. 1989. Establishment of Ambient Criteria to Limit Human Exposure to Contaminants in Fish and Shellfish. Guidance Document. Washington, D.C.: Office of Water Regulations and Standards, EPA.

9. U.S. Environmental Protection Agency. (continuous). Ambient Water Quality Criteria. EPA Series No. 440/5-80-84-85, 86. Washington, D.C.: EPA.

10. U.S. Environmental Protection Agency. 1991. Technical Support Document for Water Quality-Based Toxics Control. EPA/505/2-90-001.

11. U.S. Environmental Protection Agency. December 22, 1992. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants; States' Compliance. Federal Register: Vol. 57, No. 246. WH-FRL-4543-9. Washington, D.C.: Office of Science and Technology, EPA.

12. U.S. Environmental Protection Agency. April, 1995. Method 1669: Sampling Ambient Water for Trace Metals At EPA Water Quality Criteria Levels. EPA 821-R-95-034.

13. Webster's II New Riverside University Dictionary, Anne H. Soukhanov, editor. 1988. Houghton Mifflin Company, Boston, MA.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 10:745

(October 1984), amended LR 15:738 (September 1989), LR 17:264 (March 1991), LR 20:883 (August 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:2403 (December 1999), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2507 (October 2005), LR 33:2163 (October 2007).

§1119. Implementation Plan for Antidegradation Policy

A. Summary and Purpose

1. As stated in LAC 33:IX.1109.A of these regulations, the Antidegredation Policy provides a legal framework for the basic maintenance and protection of all designated water uses. It also outlines methods that the state uses to protect state waters from water quality degradation and some of the state and federal rules and regulations that authorize them.

2. This Section explains the specific procedures used by the department as the state's designated water quality management agency to implement the Antidegradation Policy.

B. Implementation of Louisiana's Water Quality Management Process

1. Procedures and methods by which the Antidegradation Policy is implemented are described in several documents produced under the Water Quality Management (WQM) Process ("The Water Quality Standards (WQS)," "The Water Quality Integrated Report," and "The Continuing Planning Process"). These documents are available from the department.

2. WQM is a step-by-step process which involves several interrelated programs that establish controls on the discharge of pollutants and maintain existing water quality, thereby protecting state waters from degradation. That process is summarized below.

a. The state establishes the water quality standards specified in this Chapter to reflect the goals for individual water bodies and provide the legal basis for antidegradation and for water pollution control. This Chapter also defines and designates water uses and criteria to protect them.

b. A series of water quality monitoring activities is conducted annually to provide the physical, chemical and biological data needed to determine the quality of state waters, identify pollution sources and help develop and enforce the water quality standards defined in this Chapter. Monitoring activities include maintaining monthly water quality stations, conducting intensive surveys and special studies, investigating pollution complaints, and assuring compliance of dischargers.

c. Water quality monitoring data and water body conditions are continually assessed to identify problem areas and assist in the development of water quality management plans and standards. The biennial Louisiana Water Quality Integrated Report is the state's principal tool in water quality assessment and identifies areas of water quality degradation.

d. The state's Water Quality Management Plan (WQMP) utilizes discharger data, various land use inventories, and the results of the monitoring and assessment programs to identify priority water quality problems. The WQMP contains the analyses used and management decisions made to control specific pollution sources and recommends control measures to attain the water quality standards. The plan includes provisions for identifying priority WQM basins and segments, allocating point source wasteloads, controlling nonpoint sources, general planning needs, and public participation.

e. A wastewater discharge permit is required for any discharge into state waters with the exception of those noted in LAC 33:IX.301.D and F. Permits based on water quality are developed to specify the wasteload content of the discharge that must not be exceeded to attain water quality standards and protect state waters from degradation. Other control activities include the development of best management practices for nonpoint source controls and water quality certification of federal permits.

f. Enforcement activities of the department help eliminate or ameliorate water quality degradation caused by both permitted and unpermitted discharges. Enforcement actions are directed at dischargers found to be in violation of the Water Control Law or effluent limits detailed in a wastewater permit.

g. The state's Continuing Planning Process (CPP) document describes those administrative, technical, and programmatic processes used by the state to implement its water pollution control program. The document contains detailed descriptions of each phase of implementation, from the planning of monitoring efforts, to the assessment and reporting of resulting data, to the decision-making process for carrying out policy promulgated by the department. To maintain an annual schedule of water quality needs and activities, the department also developed the Water Pollution Control Program Plan consistent with Section 106 of the Clean Water Act.

C. Specific Implementation Procedures for the Antidegradation Policy. The antidegradation policy is implemented by ensuring that for all activities which may impact water quality and are permitted by the state, or for which there must be a permit on which the state comments, consideration is given to requirements of the policy. The basic principle of the policy is that water quality criteria specified in the standards shall not be exceeded and that designated uses will not be adversely impacted.

1. If either the criteria or uses cannot be attained, then a use attainability analysis will be conducted.

2. If such activity will impact water quality by either a point or nonpoint source discharge of pollutants, the state shall ensure that the activity will not interfere with or become injurious to the existing uses. If water quality will be degraded, the state shall ensure that the intergovernmental coordination and public participation provisions of the state's Continuing Planning Process are met.

3. If the public has not been informed of the possible lowering of water quality and has had no opportunity to

comment on it, then the state shall ensure that the public is provided that opportunity. In the case of state or federal wastewater discharge permits, this may be accomplished by including notice of the possible lowering of water quality in the public notice of the permit. If the location and load proposed in the discharge permit has been previously reviewed by the public as part of the water quality management plan, additional public notice is not required. When public notice of the permit is required, the following language will be included.

> "During the preparation of this permit, it has been determined that this discharge will have no adverse impact on the existing uses of the receiving water body. As with any discharge, however, some change in existing water quality may occur."

4. If a wastewater discharge or activity is proposed for an outstanding natural resource water body, as defined by this Chapter, the administrative authority shall not approve that activity if it will cause degradation of these waters. For these purposes, *degradation* is defined as a statistically significant difference at the 90 percent confidence interval from existing physical, chemical, and biological conditions. Existing discharges of treated sanitary wastewater may be allowed if no reasonable alternative discharge location is available or if the discharge existed before the designation as an outstanding natural resource water body.

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§1121. Regulation of Toxic Substances Based on the General Criteria

A. Introduction

1. The water quality standards in this Chapter provide for the protection of human, plant, and animal life from the deleterious effects of toxic substances. The general criteria (LAC 33:IX.1113.B.5), in particular, require that state waters be free from the effects of toxic substances. This requirement is especially applicable to those toxic substances for which no numerical criteria are established.

2. The following methods are developed to protect state waters from the effects of toxic substances as required under the general criteria and where no numerical criteria exist. The methods follow the permitting policies of the Louisiana Water Discharge Permit System (LWDPS). The resulting permit (effluent) limitations imposed on discharges prevent toxic in-stream conditions as required under the general criteria.

B. Effluent Characterization/Toxicity Testing and/or Instream Assessment

1. When determining the need for limits based on water quality, the Office of Environmental Services may identify data needs and request that the permittee submit additional data along with the application. Permits may be placed into three categories:

a. discharges for which adequate data exist;

b. discharges for which some data exist; and

c. discharges for which no water-quality-related data are available.

2. In areas of known ambient toxicity, both specific chemical data and available whole effluent toxicity data representative of the facility's discharge into the receiving water will be reviewed.

3. In general, whole effluent toxicity testing will be required in the permit for discharges where data are insufficient to demonstrate that any discharge does not or will not contribute to ambient toxicity.

a. Tests will be routinely run for the life of the permit on an established schedule dependent upon on the variability of the discharge and on whether effluent toxicity is suspected or unknown.

b. Both acute toxicity and chronic toxicity tests may be required. Test methods found in the following sources or their updated versions should be followed: "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," 4th Edition, EPA/600/4-90/027F, EPA, 1993; "Short-Term Methods for Estimating the Chronic Toxicity of Effluents And Receiving Waters To Freshwater Organisms," 3rd Edition, EPA/600/4-91/002, EPA, 1994; and "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms," 2nd Edition, EPA/600/4-91/003, EPA.

i. Acute toxicity tests will be considered for "end-of-pipe" effluent. Dilution water will be receiving water collected at a point upstream of or adequately removed from the discharge point(s).

ii. For chronic toxicity tests of effluent, dilution water will also be receiving stream water collected at a point upstream of or adequately removed from the discharge point(s). In flowing water bodies, one dilution in the series required to calculate the no-observed-effect level (NOEL) will reflect the 7Q10 flow dilution. In some water bodies the 7Q10 flow may not be considered adequate, and a more appropriate low flow will be used for dilution calculations.

iii. Multiple toxicity tests using more than one species of test organisms will normally be required. The following tests and species are considered applicable to and representative of Louisiana waters. Other applicable tests and test species may also be used after approval by the department. In general, some combination of the following tests and species will be required:

(a). for receiving water bodies with salinities less than 2 ‰(2 ppt or 2,000 ppm):

(i). 48-hour *Ceriodaphnia* or *Daphnia pulex* acute survival;

(ii). 48- and 96-hour fathead minnow *(Pimephales promelas)* static renewal acute survival;

(iii). 7-day *Ceriodaphnia* chronic reproduction and survival;

(iv). 7-day fathead minnow chronic survival and teratogenicity;

(v). 7-day fathead minnow chronic growth and survival; and

(vi). 4-day *Selenastrum* chronic growth test;

(b). for receiving water bodies with salinities equal to or greater than 2 ‰ (2 ppt or 2,000 ppm):

(i). 48-hour mysid shrimp acute survival;

(ii). 48- and 96-hour sheepshead minnow *(Cyprinodon variegatus)* static renewal acute survival;

(iii). 48-hour inland silverside *(Menidia beryllina)* static renewal acute survival;

(iv). 7-day mysid shrimp survival, growth, and fecundity;

(v). 7-day sheepshead minnow larval survival and growth; and

(vi). 7-day inland silverside larval survival and growth; and

(c). if a control test reveals upstream ambient water to be toxic, the discharger will redo the toxicity tests using EPA- and department-approved reconstituted water with hardness, alkalinity, pH, and conductivity comparable to the ambient stream for dilution. The department will evaluate the toxicity data if upstream toxicity is indicated.

4. For water bodies whose designated use is as a drinking water supply, the department will calculate the in-stream concentration for all discharged pollutants for which EPA has promulgated a maximum contaminant level (MCL). The permittee will be required to submit to the Office of Environmental Services sufficient effluent characterization data to make these calculations. Where dilution calculations indicate that in-stream concentrations may exceed the MCL requirements at appropriate flow conditions, the permittee may be required to conduct in-stream chemical monitoring or monitoring at the water supply.

5. To protect human health by eliminating chronic exposure to potentially toxic amounts of pollutants from aquatic species consumed by humans, the department will calculate the in-stream concentrations of all applicable pollutants for which EPA has published human health criteria in the Quality Criteria for Water, 1986, EPA 440/5-86-001, or subsequent revisions. The permittee will be required to submit to the Office of Environmental Services sufficient effluent characterization data to make these calculations. For operational considerations, if dilution calculations show that after mixing, a suspected carcinogen would be present in the receiving water body at a concentration associated with a 10^{-6} risk level, in-stream chemical monitoring may be required of the appropriate dischargers. The department will list the water body as a priority water body and develop a wasteload allocation or make other consideration for it.

C. Options for Implementing Whole Effluent Toxicity Permit Requirements. The option or combination of options to be selected by the department from the following will depend on data availability at the time of permit application and on whether toxicity is known or suspected.

1. Option 1. Final whole effluent toxicity limits are included in the permit with an interim schedule for conducting toxicity reduction that begins upon issuance of the permit.

2. Option 2. The permittee will conduct whole effluent toxicity testing with pass/fail criteria that will trigger toxicity reduction efforts. A clause requiring this will be placed in the permit to take effect if the pass/fail criteria are exceeded when any toxic impact exhibited shows a statistically significant difference between the effluent sample and the control. If any toxicity test is failed, an opportunity for retesting will be given. When no toxicity is demonstrated or no toxicity criteria are exceeded, testing may be reduced for the remainder of the term of the permit. If any subsequent testing indicates toxicity, the permittee must revert to the more frequent monitoring schedule.

3. Option 3. No whole effluent toxicity limits are included in the permit. Limits based on MCLs and/or on protecting human health are included, or a schedule for their inclusion is incorporated into the permit.

4. Option 4. No whole effluent toxicity limits are included in the permit.

5. Option 5. A combination of the above four options may be applied.

D. References. The following references were used in developing or were cited in this Section:

1. U.S. Environmental Protection Agency. 1986. Quality Criteria for Water: 1986. EPA 440/5-86-001. Washington, D.C.: U.S. Government Printing Office.

2. U.S. Environmental Protection Agency. 1991. Methods for Aquatic Toxicity Identification Evaluations: Phase I, Toxicity Characterization Procedures. EPA/600/6-91/003. Washington, D.C.: EPA.

3. U.S. Environmental Protection Agency. 1991. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. 2nd Edition. EPA/600/4-91/003.

4. U.S. Environmental Protection Agency. 1991. Technical Support Document for Water Quality-Based Toxics Control. EPA/505/2-90-001.

5. U.S. Environmental Protection Agency. 1993. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. 4th Edition. EPA/600/4-90/027F.

6. U.S. Environmental Protection Agency. 1994. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. 3rd Edition. EPA/600/4-91/002.

E. Additional Toxicity Testing Guidance. The following references are cited as guidance documents that are used for biomonitoring:

1. U.S. Environmental Protection Agency. 1994. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates. EPA/600/R-94/024.

2. U.S. Environmental Protection Agency. 1994. Methods for Assessing the Toxicity of Sediment Associated Contaminants with Estuarine and Marine Amphipods. EPA/600/R-94/025.

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§1123. Numerical Criteria and Designated Uses

A. Designated Water Quality Management Basins

Basin Name	Basin Number
Atchafalaya River Basin	01
Barataria Basin	02
Calcasieu River Basin	03
Lake Pontchartrain Basin	04
Mermentau River Basin	05
Vermilion-Teche River Basin	06
Mississippi River Basin	07
Ouachita River Basin	08
Pearl River Basin	09
Red River Basin	10
Sabine River Basin	11
Terrebonne Basin	12

B. Explanation of Water Body Code Number. The water body subsegment number and unique water body identification code are designated as follows:

AABBCC-XXX

where:

AA = Water Quality Management Basin Number
BB = Segment Number
CC = Subsegment Number
XXX = A minimum of three digits Unique Water Body Identification Code (If a Unique Water Body Identification Code is not identified for a particular Subsegment, then all water bodies within that Subsegment have the same designated uses and numerical criteria.)

Example:

090207-5112 = Water Body Subsegment and Identification Code for Morgan Bayou

where:

09 = Pearl River Management Basin
0902 = Segment 0902 of the Pearl River Management Basin
090207 = Subsegment 090207 of Pearl River Management Basin Segment 02
5112 = Four-digit Unique Water Body Identification Code for Morgan Bayou

C. Numerical Criteria Unit Definitions

1. Parameter Abbreviations. The following abbreviations of water quality parameters are used in Table 3 under the subheading "Numerical Criteria."

Abbreviation	Parameter
CL	Chlorides in mg/L
SO_4	Sulfates in mg/L
DO	Dissolved Oxygen in mg/L
pH	Range of pH Units
BAC	Bacterial Criteria (See Below)
°C	Temperature in Degrees Centigrade (°C)
TDS	Total Dissolved Solids in mg/L
N/A	Not Available at Present

2. Bacterial Criteria (BAC)

a. The code numbers associated with the following designated uses are used in Table 3 under the Numerical Criteria subheading "BAC."

Code	Designated Use
1	Primary Contact Recreation
2	Secondary Contact Recreation
3	Drinking Water Supply
4	Oyster Propagation

b. The code number identified under the Numerical Criteria subheading "BAC" in Table 3 represents the most stringent bacterial criteria that apply to each individual subsegment. Where applicable, additional less stringent bacterial criteria also apply, depending on the designated uses of the subsegment. The specified numeric bacterial criteria for each designated use listed in this Paragraph can be found in LAC 33:IX.1113.C.

D. Designated Uses. The following notations for water use designations are used in Table 3 under the subheading "Designated Uses."

Notation	Designated Use
A	Primary Contact Recreation
B	Secondary Contact Recreation
C	Fish and Wildlife Propagation
L	Limited Aquatic Life and Wildlife Use
D	Drinking Water Supply
E	Oyster Propagation
F	Agriculture
G	Outstanding Natural Resource Waters

E. Endnotes. Numbers in brackets, e.g. [1], in Table 3 refer to endnotes listed at the end of the table.

Table 3. Numerical Criteria and Designated Uses									
A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters									
			Numerical Criteria						
Code	**Stream Description**	**Designated Uses**	**CL**	**SO_4**	**DO**	**pH**	**BAC**	**°C**	**TDS**
Atchafalaya River Basin (01)									
010101	Atchafalaya River Headwaters and Floodplain–From Old River Control Structure to Simmesport; includes Old River Diversion Channel, Lower Red River, Lower Old River	A B C	65	70	5.0	6.5-8.5	1	33	440
010201	Atchafalaya River Mainstem–From Simmesport to Whiskey Bay Pilot Channel at mile 54	A B C	65	70	5.0	6.5-8.5	1	33	440
010301	West Atchafalaya Basin Floodway–From Simmesport to Butte LaRose Bay and Henderson Lake	A B C	65	70	5.0	6.5-8.5	1	33	440
010401	East Atchafalaya Basin and Morganza Floodway South to I-10 Canal	A B C	65	70	5.0	6.5-8.5	1	33	440
010501	Lower Atchafalaya Basin Floodway–From Whiskey Bay Pilot Channel at mile 54 to US-90 bridge in Morgan City; includes Grand Lake and Six-Mile Lake	A B C D	65	70	5.0	6.5-8.5	1	33	440
010502	Intracoastal Waterway (ICWW)–Morgan City-Port Allen Route from Bayou Sorrel Lock to Morgan City	A B C D	65	70	5.0	6.5-8.5	1	33	440
010601	Crow Bayou, Bayou Blue, and Tributaries	A B C	80	50	5.0	6.0-8.5	1	32	350
010701	Bayou Teche–From Berwick to Wax Lake Outlet	A B C D	80	50	5.0	6.0-8.5	1	32	350
010801	Atchafalaya River–From ICWW south of Morgan City to Atchafalaya Bay; includes Sweetwater Lake and Bayou Shaffer	A B C	500	150	5.0	6.5-9.0	1	35	1,000
010802	Wax Lake Outlet–From US-90 bridge to Atchafalaya Bay; includes Wax Lake	A B C	500	150	5.0	6.5-9.0	1	35	1,000
010803	Intracoastal Waterway–From Bayou Boeuf Lock to Bayou Sale; includes Wax Lake Outlet to US-90	A B C	65	70	5.0	6.0-8.5	1	32	440
010901	Atchafalaya Bay and Delta and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A
Barataria Basin (02)									
020101	Bayou Verret, Bayou Chevreuil, Bayou Citamon, and Grand Bayou	A B C F	65	50	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	430
020102	Bayou Boeuf, Halpin Canal, and Theriot Canal	A B C F	500	150	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	1,000
020103	Lake Boeuf	A B C	500	150	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	1,000
020201	Bayou Des Allemands–From Lac Des Allemands to old US-90 (Scenic)	A B C G	600	100	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	1,320
020202	Lac Des Allemands	A B C	600	100	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	1,320
020301	Bayou Des Allemands–From US-90 to Lake Salvador (Scenic)	A B C G	600	100	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	1,320

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
020302	Bayou Gauche	A B C	600	100	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	1,320
020303	Lake Cataouatche and Tributaries	A B C	500	150	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	1,000
020303-001	Luling Wetland–Forested wetland located 1.8 miles south of US-90 at Luling, east of the Luling wastewater treatment pond, bordered by Cousin Canal to the west and Louisiana Cypress Lumber Canal to the south	B C	[23]	[23]	[23]	[23]	2	[23]	[23]
020304	Lake Salvador	A B C	600	100	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	1,320
020401	Bayou Lafourche–From Donaldsonville to ICWW at Larose	A B C D	70	55	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	500
020402	Bayou Lafourche–From ICWW at Larose to Yankee Canal (Estuarine)	A B C	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	1	32	N/A
020403	Bayou Lafourche–From Yankee Canal and saltwater barrier to Gulf of Mexico (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	32	N/A
020501	Sauls, Avondale, and Main Canals	A B C	65	50	5.0	6.0-8.5	1	32	430
020601	Intracoastal Waterway–From Bayou Villars to Mississippi River (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
020701	Bayou Segnette–From headwaters to Bayou Villars	A B C	600	100	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	1,320
020801	Intracoastal Waterway–From Larose to Bayou Villars and Bayou Barataria (Estuarine)	A B C	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	1	35	N/A
020802	Bayou Barataria and Barataria Waterway–From ICWW to Bayou Rigolettes (Estuarine)	A B C	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	1	35	N/A
020901	Bayou Rigolettes and Bayou Perot to Little Lake (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	35	N/A
020902	Little Lake (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
020903	Barataria Waterway (Estuarine)	A B C	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	1	35	N/A
020904	Wilkinson Canal and Wilkinson Bayou (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	35	N/A
020905	Bayou Moreau (Estuarine)	A B C E	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	4	35	N/A

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
020906	Bay Rambo (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
020907	Bay Sansbois, Lake Judge Perez, and Bay De La Cheniere (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
021001	Lake Washington, Bastian Bay, Adams Bay, Scofield Bay, Coquette Bay, Tambour Bay, Spanish Pass, and Bay Jacques (Estuarine)	A B C E	N/A	N/A	4.0	6.5-8.5	4	35	N/A
021101	Barataria Bay; includes Caminada Bay, Hackberry Bay, Bay Batiste, and Bay Long (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
021102	Barataria Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A
Calcasieu River Basin (03)									
030101	Calcasieu River–From headwaters to LA-8	A B C F	65	35	5.0	6.0-8.5	1	32	225
030102	Calcasieu River–From LA-8 to the Rapides-Allen Parish line (Scenic)	A B C F G	65	35	5.0	6.0-8.5	1	32	225
030103	Calcasieu River–From Rapides-Allen Parish line to Marsh Bayou (Scenic) [10]	A B C F G-[10]	65	35	5.0	6.0-8.5	1	32	225
030103-04075	Kinder Ditch–From headwaters of unnamed tributary to confluence with Calcasieu River	B C	65	35	3.0	6.0-8.5	1	32	225
030104	Mill Creek–From headwaters to Calcasieu River	A B C	60	60	5.0	6.0-8.5	1	32	250
030201	Calcasieu River–From Marsh Bayou to saltwater barrier (Scenic) [11]	A B C F G-[11]	350	40	[1]	6.0-8.5	1	32	500
030301	Calcasieu River and Ship Channel–From saltwater barrier to Moss Lake; includes Ship Channel, Coon Island Loop, and Clooney Island Loop (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
030302	Lake Charles	A B C	N/A	N/A	5.0	6.0-8.5	1	35	N/A
030303	Prien Lake	A B C	N/A	N/A	5.0	6.0-8.5	1	35	N/A
030304	Moss Lake (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
030305	Contraband Bayou (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
030306	Bayou Verdine–south of the Houston River Canal to the Calcasieu River (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
030401	Calcasieu River–From below Moss Lake to the Gulf of Mexico; includes Ship Channel and Monkey Island Loop (Estuarine)	A B C E	N/A	N/A	4.0	6.0-8.5	4	35	N/A
030402	Calcasieu Lake	A B C E	N/A	N/A	5.0	6.0-8.5	4	32	N/A
030403	Black Lake (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
030501	Whiskey Chitto Creek–From headwaters to southern boundary of Fort Polk Military Reservation	A B C	20	20	5.0	6.0-8.5	1	30	150
030502	Whiskey Chitto Creek–From the southern boundary of Fort Polk Military Reservation to the Calcasieu River (Scenic)	A B C G	20	20	5.0	6.0-8.5	1	30	150
030503	Six Mile Creek–East and West Forks from headwaters to the southern boundary of Fort Polk Military Reservation	A B C	20	20	5.0	6.0-8.5	1	30	150
030504	Six Mile Creek–East and West Forks from the southern boundary of Fort Polk Military Reservation to Whiskey Chitto Creek (Scenic)	A B C G	20	20	5.0	6.0-8.5	1	30	150
030505	Ten Mile Creek–From headwaters to Whiskey Chitto Creek (Scenic)	A B C G	20	20	5.0	6.0-8.5	1	30	150
030506	Bundicks Creek–From headwaters to Bundicks Lake	A B C	20	20	5.0	6.0-8.5	1	30	150
030507	Bundicks Lake	A B C	20	20	5.0	6.0-8.5	1	30	150

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
030508	Bundicks Creek–From Bundicks Lake to Whiskey Chitto Creek	A B C	20	20	5.0	6.0-8.5	1	30	150
030601	Barnes Creek–From headwaters to Little Barnes Creek	B C	60	60	[2]	6.0-8.5	2	30	150
030602	Barnes Creek–From Little Barnes Creek to Calcasieu River	A B C	60	60	5.0	6.0-8.5	1	32	250
030603	Marsh Bayou–From headwaters to Calcasieu River	A B C	60	60	5.0	6.0-8.5	1	32	250
030701	Bayou Serpent	A B C F	250	75	5.0	6.0-8.5	1	32	300
030702	English Bayou–From headwaters to Calcasieu River	A B C F	250	75	[3]	6.0-8.5	1	32	300
030801	West Fork Calcasieu River–From confluence with Beckwith Creek and Hickory Branch to mainstem of Calcasieu River	A B C F	250	75	[3]	6.0-8.5	1	34	500
030802	Hickory Branch–From headwaters to West Fork Calcasieu River	A B C F	250	75	5.0	6.0-8.5	1	32	500
030803	Beckwith Creek–From headwaters to West Fork Calcasieu River	A B C F	25	25	5.0	6.0-8.5	1	32	100
030804	Little River–From headwaters to West Fork Calcasieu River	A B C	250	75	[3]	6.0-8.5	1	34	500
030805	Indian Bayou–From headwaters to West Fork Calcasieu River	A B C F	250	75	[3]	6.0-8.5	1	34	500
030806	Houston River-From Bear Head Creek at LA-12 to West Fork Calcasieu River	A B C F	250	75	[3]	6.0-8.5	1	32	500
030806-554700	Houston River Canal–From 1 mile west of LA-388 to its terminuses at Mossville and the Houston River	A B C D F	250	75	[3]	6.0-8.5	1	32	500
030807	Bear Head Creek–From headwaters to Houston River at LA-12	A B C	250	75	5.0	6.0-8.5	1	32	500
030901	Bayou D'Inde–From headwaters to Calcasieu River (Estuarine)	A B C	N/A	N/A	4.0	6.5-8.5	1	35	N/A
031001	Bayou Choupique–From headwaters to ICWW (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
031002	Intracoastal Waterway–From West Calcasieu River Basin boundary to Calcasieu Lock (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
031101	Intracoastal Waterway–From Calcasieu Lock to East Calcasieu River Basin boundary	A B C	250	75	5.0	6.5-9.0	1	32	500
031201	Calcasieu River Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.0-9.0	4	32	N/A
Lake Pontchartrain Basin (04)									
040101	Comite River–From Little Comite Creek and Comite Creek at Mississippi state line to Wilson-Clinton Hwy.	A B C	25	10	5.0	6.0-8.5	1	32	150
040102	Comite River–From Wilson-Clinton Hwy. to White Bayou (Scenic)	A B C G	25	10	5.0	6.0-8.5	1	32	150
040103	Comite River–From White Bayou to Amite River	A B C	25	10	5.0	6.0-8.5	1	32	150
040201	Bayou Manchac–From headwaters to Amite River	A B C	25	10	5.0	6.0-8.5	1	32	150
040301	Amite River–From Mississippi state line to LA-37 (Scenic)	A B C G	25	10	5.0	6.0-8.5	1	32	150
040302	Amite River–From LA-37 to Amite River Diversion Canal	A B C	25	10	5.0	6.0-8.5	1	32	150
040303	Amite River–From Amite River Diversion Canal to Lake Maurepas	A B C	25	10	5.0	6.0-8.5	1	32	150
040304	Grays Creek–From headwaters to Amite River	A B C	25	10	5.0	6.0-8.5	1	32	150
040305	Colyell Creek; includes tributaries and Colyell Bay	A B C	25	10	5.0	6.0-8.5	1	32	150
040401	Blind River–From Amite River Diversion Canal to mouth at Lake Maurepas (Scenic)	A B C G	250	75	4.0 [9]	6.0-8.5	1	30	500

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
040402	Amite River Diversion Canal–From Amite River to Blind River	A B C	25	10	5.0	6.0-8.5	1	32	150
040403	Blind River–From headwaters to Amite River Diversion Canal (Scenic)	A B C G	250	75	3.0 [9]	6.0-8.5	1	30	500
040404	New River–From headwaters to New River Canal	A B C	250	75	5.0	6.0-8.5	1	30	500
040501	Tickfaw River–From Mississippi state line to LA-42 (Scenic)	A B C G	10	5	5.0	6.0-8.5	1	30	55
040502	Tickfaw River–From LA-42 to Lake Maurepas	A B C	10	5	5.0	6.0-8.5	1	30	55
040503	Natalbany River–From headwaters to Tickfaw River	A B C	30	20	5.0	6.0-8.5	1	30	150
040504	Yellow Water River–From headwaters to Ponchatoula Creek	A B C	30	20	5.0	6.0-8.5	1	30	150
040505	Ponchatoula Creek and Ponchatoula River	A B C	30	20	5.0	6.0-8.5	1	30	150
040601	Pass Manchac–From Lake Maurepas to Lake Pontchartrain	A B C	1,600	200	5.0	6.5-9.0	1	32	3,000
040602	Lake Maurepas	A B C	1,600	200	5.0	6.0-8.5	1	32	3,000
040603	Selsers Creek–From headwaters to South Slough	A B C	30	20	5.0	6.0-8.5	1	30	150
040604	South Slough; includes Anderson Canal to I-55 borrow pit	A B C	30	20	5.0	6.0-8.5	1	30	150
040604-001	South Slough Wetland–Forested freshwater and brackish marsh located 1.4 miles south of Ponchatoula, directly east of I-55, extending to North Pass to the south and Tangipahoa River to the east	B C	[23]	[23]	[23]	[23]	2	[23]	[23]
040701	Tangipahoa River–From Mississippi state line to I-12 (Scenic)	A B C G	30	10	5.0	6.0-8.5	1	30	140
040702	Tangipahoa River–From I-12 to Lake Pontchartrain	A B C	30	10	5.0	6.0-8.5	1	30	140
040703	Big Creek–From headwaters to Tangipahoa River	A B C	20	20	5.0	6.0-8.5	1	30	140
040704	Chappepeela Creek–From LA-1062 to Tangipahoa River	A B C G	20	20	5.0	6.0-8.5	1	30	140
040801	Tchefuncte River–From headwaters to Bogue Falaya River; includes tributaries (Scenic)	A B C G	20	10	5.0	6.0-8.5	1	30	110
040802	Tchefuncte River–From Bogue Falaya River to LA-22 (Scenic)	A B C G	850	135	5.0	6.0-8.5	1	30	1,850
040803	Tchefuncte River–From LA-22 to Lake Pontchartrain (Estuarine)	A B C	850	135	4.0	6.0-8.5	1	30	1,850
040804	Bogue Falaya River–From headwaters to Tchefuncte River (Scenic) [12]	A B C G-[12]	20	10	5.0	6.0-8.5	1	30	110
040805	Chinchuba Swamp Wetland–Forested wetland located 0.87 miles southwest of Mandeville, southeast of Sanctuary Ridge, and north of Lake Pontchartrain	B C	[23]	[23]	[23]	[23]	2	[23]	[23]
040806	East Tchefuncte Marsh Wetland–Freshwater and brackish marsh located just west of Mandeville, bounded on the south by Lake Pontchartrain, the west by Tchefuncte River, the north by LA-22, and the east by Sanctuary Ridge	B C	[23]	[23]	[23]	[23]	2	[23]	[23]
040901	Bayou LaCombe–From headwaters to US-190 (Scenic)	A B C G	30	30	5.0	6.0-8.5	1	30	150
040902	Bayou LaCombe–From US-190 to Lake Pontchartrain (Scenic) (Estuarine)	A B C G	835	135	4.0	6.0-8.5	1	32	1,850
040903	Bayou Cane–From headwaters to US-190 (Scenic)	A B C G	30	30	5.0	6.0-8.5	1	30	150
040904	Bayou Cane–From US-190 to Lake Pontchartrain (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.0-8.5	1	32	N/A
040905	Bayou Liberty–From headwaters to LA-433	A B C	250	100	5.0	6.0-8.5	1	32	500

Table 3. Numerical Criteria and Designated Uses

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
040906	Bayou Liberty–From LA-433 to Bayou Bonfouca (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
040907	Bayou Bonfouca–From headwaters to LA-433	A B C	250	100	5.0	6.0-8.5	1	32	500
040908	Bayou Bonfouca–From LA-433 to Lake Pontchartrain (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
040909	W-14 Main Diversion Canal–From headwaters to Salt Bayou	A B C-[4]	N/A	N/A	[4]	6.0-8.5	1	32	N/A
040910	Salt Bayou–From headwaters to Lake Pontchartrain (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
040911	Grand Lagoon; includes associated canals (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
041001	Lake Pontchartrain–West of US-11 bridge (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	32	N/A
041002	Lake Pontchartrain–East of US-11 bridge (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	32	N/A
041101	Bonnet Carre Spillway	A B C	250	75	5.0	6.0-8.5	1	30	500
041201	Bayou Labranche–From headwaters to Lake Pontchartrain (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.0-8.5	1	32	N/A
041202	Bayou Trepagnier–From Norco to Bayou Labranche (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.0-8.5	1	32	N/A
041203	Duncan Canal–From headwaters to Lake Pontchartrain; also called Parish Line Canal (Estuarine)	A B C	N/A	N/A	4.0	6.5-8.5	1	32	N/A
041301	Bayou St. John (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.0-8.5	1	32	N/A
041302	Lake Pontchartrain Drainage Canals in Jefferson and Orleans Parishes (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
041401	New Orleans East Leveed Water Bodies (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
041501	Inner Harbor Navigation Canal–From Mississippi River Lock to Lake Pontchartrain (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041601	Intracoastal Waterway–From Inner Harbor Navigation Canal to Chef Menteur Pass (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
041701	The Rigolets (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	32	N/A
041702	Bayou Sauvage–From New Orleans hurricane protection levee to Chef Menteur Pass; includes Chef Menteur Pass (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	32	N/A
041703	Intracoastal Waterway–From Chef Menteur Pass to Lake Borgne (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	32	N/A
041704	Lake St. Catherine	A B C	N/A	N/A	5.0	6.5-9.0	1	32	N/A
041801	Bayou Bienvenue–From headwaters to hurricane gate at MRGO (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041802	Bayou Chaperon (Scenic)(Estuarine)	A B C G	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041803	Bashman Bayou–From headwaters to Bayou Dupre (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041804	Bayou Dupre–From Lake Borgne Canal to Terre Beau Bayou (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041805	Lake Borgne Canal–From Mississippi River siphon at Violet to Bayou Dupre; also called Violet Canal (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041806	Pirogue Bayou–From Bayou Dupre to New Canal (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041807	Terre Beau Bayou–From Bayou Dupre to New Canal (Scenic) (Estuarine)	A B C G	N/A	N/A	4.0	6.5-9.0	1	35	N/A
041808	New Canal (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
041809	Poydras-Verret Marsh Wetland–Forested and marsh wetland located 1.5 miles north of St. Bernard, south of Violet Canal, and northeast of Forty Arpent Canal	B C	[17]	[17]	[17]	[17]	2	[17]	[17]
041901	Mississippi River Gulf Outlet (MRGO)–From ICWW to Breton Sound at MRGO mile 30	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042001	Lake Borgne	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042002	Bayou Bienvenue–From Bayou Villere to Lake Borgne (Scenic) (Estuarine)	A B C E G	N/A	N/A	4.0	6.5-9.0	4	35	N/A
042003	Bayou La Loutre–From MRGO to Eloi Bay (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
042004	Bayou Bienvenue–From MRGO to Bayou Villere (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
042101	Bayou Terre Aux Boeufs (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
042102	River Aux Chenes; also called Oak River (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
042103	Bayou Gentilly–From Bayou Terre Aux Boeufs to Petit Lake (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
042104	Petit Lake	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042105	Lake Lery	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042201	Chandeleur Sound	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042202	California Bay and Breton Sound	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042203	Bay Boudreau	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042204	Drum Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042205	Morgan Harbor	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042206	Eloi Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042207	Lake Fortuna	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042208	Bay Gardene, Black Bay, Lost Bayou, American Bay, and Bay Crabe	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
042209	Lake Pontchartrain Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A
Mermentau River Basin (05)									
050101	Bayou Des Cannes–From headwaters to Mermentau River	A B C F	90	30	[16]	6.0-8.5	1	32	260
050103	Bayou Mallet–From headwaters to Bayou Des Cannes	A B C F	90	30	[16]	6.0-8.5	1	32	260
050201	Bayou Plaquemine Brule–From headwaters to Bayou Des Cannes	A B C F	90	30	[16]	6.0-8.5	1	32	260
050301	Bayou Nezpique–From headwaters to Mermentau River; includes intermittent portion of Beaver Creek [2]	A B C F	90	30	[16]	6.0-8.5	1	32	260
050303	Castor Creek–From headwaters to Bayou Nezpique	A B C	90	30	[16]	6.0-8.5	1	32	260
050304	Bayou Blue–From headwaters to Bayou Nezpique	A B C	90	30	[16]	6.0-8.5	1	32	260
050401	Mermentau River–From headwaters to Lake Arthur	A B C F	90	30	[16]	6.0-8.5	1	32	260
050402	Lake Arthur and Lower Mermentau River to Grand Lake	A B C	90	30	5.0	6.0-8.5	1	32	260
050501	Bayou Queue de Tortue–From headwaters to Mermentau River	A B C F	90	30	[16]	6.0-8.5	1	32	260

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
050601	Lacassine Bayou–From headwaters to Grand Lake	A B C F	90	10	[16]	6.0-8.5	1	32	400
050602	Intracoastal Waterway–From Calcasieu River Basin Boundary to Mermentau River	A B C F	250	75	5.0	6.5-9.0	1	32	500
050603	Bayou Chene–From headwaters to Lacassine Bayou; includes Bayou Grand Marais	A B C F	90	10	5.0	6.5-9.0	1	32	400
050701	Grand Lake	A B C F	250	75	5.0	6.5-9.0	1	32	500
050702	Intracoastal Waterway–From Mermentau River to Vermilion Locks	A B C F	250	75	5.0	6.0-9.0	1	32	500
050703	White Lake	A B C F	250	75	5.0	6.5-9.0	1	32	500
050801	Mermentau River–From Catfish Point Control Structure to Gulf of Mexico (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
050802	Big Constance Lake; includes associated water bodies (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
050901	Mermentau River Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A
Vermilion-Teche River Basin (06)									
060101	Spring Creek–From headwaters to Cocodrie Lake (Scenic)	A B C G	10	5	5.0	6.0-8.5	1	30	100
060102	Cocodrie Lake	A B C	10	5	[19]	6.0-8.5	1	32	100
060201	Bayou Cocodrie–From US-167 to Bayou Boeuf-Cocodrie Diversion Canal (Scenic)	A B C G	45	35	[19]	6.0-8.5	1	32	100
060202	Bayou Cocodrie–From Cocodrie Diversion Canal to Bayou Boeuf	A B C	45	35	5.0	6.0-8.5	1	32	100
060203	Chicot Lake	A B C	90	30	5.0	6.0-8.5	1	32	260
060204	Bayou Courtableau–From headwaters to West Atchafalaya Borrow Pit Canal	A B C	65	70	[22]	6.0-8.5	1	32	440
060206	Indian Creek and Indian Creek Reservoir	A B C	10	5	5.0	6.0-8.5	1	32	100
060207	Bayou des Glaises Diversion Channel/West Atchafalaya Borrow Pit Canal–From Bayou des Glaises to Bayou Courtableau	A B C	100	75	5.0	6.0-8.5	1	32	500
060208	Bayou Boeuf–From headwaters to Bayou Courtableau	A B C	45	35	5.0	6.0-8.5	1	32	100
060209	Irish Ditch and Big Bayou–From unnamed ditch to Irish Ditch No. 1 to Big Bayou to Irish Ditch No. 2 to Bayou Rapides	B C	45	35	[2]	6.0-8.5	2	32	100
060210	Bayou Carron	A B C	40	30	5.0	6.0-8.5	1	32	220
060211	West Atchafalaya Borrow Pit Canal–From Bayou Courtableau to Henderson; includes Bayou Portage	A B C	65	70	5.0	6.0-8.5	1	32	440
060212	Chatlin Lake Canal and Bayou DuLac–From Alexandria to Bayou des Glaises Diversion Canal; includes a portion of Bayou DeGlaises	A B C	45	35	5.0	6.0-8.5	1	32	100
060301	Bayou Teche–From headwaters at Bayou Courtableau to Keystone Locks and Dam	A B C	65	70	5.0	6.0-8.5	1	32	440
060401	Bayou Teche–From Keystone Locks and Dam to Charenton Canal	A B C	80	50	5.0	6.0-8.5	1	32	350
060501	Bayou Teche–From Charenton Canal to Wax Lake Outlet	A B C D	80	50	5.0	6.0-8.5	1	32	350
060601	Charenton Canal–From Charenton Floodgate to ICWW; includes Bayou Teche from Charenton to Baldwin	A B C D	250	75	5.0	6.0-8.5	1	32	500
060701	Tete Bayou	A B C	80	50	5.0	6.0-8.5	1	32	350
060702	Lake Fausse Point and Dauterive Lake	A B C	80	50	5.0	6.0-8.5	1	32	350
060703	Bayou Du Portage	A B C	80	50	5.0	6.0-8.5	1	32	350

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
060801	Vermilion River–From headwaters to LA-3073 bridge	A B C F	230	70	5.0	6.0-8.5	1	32	440
060801-001	Cote Gelee Wetland–Forested wetland located in Lafayette Parish, 2 miles east of Broussard, 2 miles northeast of US-90, and west of Bayou Tortue	B C	[23]	[23]	[23]	[23]	2	[23]	[23]
060802	Vermilion River–From LA-3073 bridge to ICWW	A B C F	230	70	[6]	6.0-8.5	1	32	440
060803	Vermilion River Cutoff–From ICWW to Vermilion Bay (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060804	Intracoastal Waterway–From Vermilion Lock to 1/2 mile west of Gum Island Canal (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060805	Breaux Bridge Swamp–Forested wetland in St. Martin Parish, 1/2 mile southwest of Breaux Bridge, southeast of LA-94, west of Bayou Teche, east of Vermilion River, and north of Evangeline and Ruth Canals; also called Cyprière Perdue Swamp	B C	[5]	[5]	[5]	[5]	2	[5]	[5]
060806	Cypress Island Coulee Wetland–Forested wetland located in St. Martin Parish, 2 miles west of St. Martinville, 1/2 mile north of LA-96, west of Bayou Teche, and east of Vermilion River	B C	[23]	[23]	[23]	[23]	2	[23]	[23]
060901	Bayou Petite Anse–From headwaters to Bayou Carlin (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060902	Bayou Carlin–From Lake Peigneur to Bayou Petite Anse; also called Delcambre Canal (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060903	Bayou Tigre–From headwaters to Bayou Petite Anse (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060904	New Iberia Southern Drainage Canal–From headwaters to ICWW (Estuarine)	A B L-[24]	N/A	N/A	[24]	6.5-9.0	[24]	35	N/A
060906	Intracoastal Waterway–From New Iberia Southern Drainage Canal to Bayou Sale (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060907	Franklin Canal	A B C	250	75	5.0	6.0-8.5	1	35	500
060908	Spanish Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
060909	Lake Peigneur	A B C	N/A	N/A	5.0	6.5-9.0	1	35	N/A
060910	Boston Canal; includes associated canals (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
060911	Dugas Canal–By Tiger Lagoon Oil and Gas Field (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
061001	West Cote Blanche Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
061002	East Cote Blanche Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
061101	Bayou Petite Anse–From Bayou Carlin at its confluence with Bayou Tigre to ICWW (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
061102	Intracoastal Waterway–From 1/2 mile west of Gum Island Canal to New Iberia Southern Drainage Canal (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
061103	Freshwater Bayou Canal–From 1/2 mile below ICWW to control structure (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	1	35	N/A
061104	Vermilion Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
061105	Marsh Island (Estuarine)	A B C	N/A	N/A	4.0	6.5-9.0	4	35	N/A
061201	Vermilion-Teche River Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.0-9.0	4	32	N/A

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
Mississippi River Basin (07)									
070101	Mississippi River–From Arkansas state line to Old River Control Structure	A B C	75	120	5.0	6.0-9.0	1	32	400
070102	Gassoway Lake	A B C	75	120	5.0	6.0-8.5	1	32	400
070103	Marengo Bend–Portion within the Louisiana state line	A B C D	250	75	5.0	6.0-8.5	1	32	500
070201	Mississippi River–From Old River Control Structure to Monte Sano Bayou	A B C D	75	120	5.0	6.0-9.0	1	32	400
070202	Raccourci Old River	A B C	100	75	5.0	6.0-8.5	1	32	500
070203	Devil's Swamp Lake and Bayou Baton Rouge	A B C	75	120	5.0	6.0-8.5	1	32	400
070301	Mississippi River–From Monte Sano Bayou to Head of Passes	A B C D	75	120	5.0	6.0-9.0	1	32	400
070401	Mississippi River Passes–Head of Passes to Mouth of Passes; includes all passes in the birdfoot delta (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
070501	Bayou Sara–From Mississippi state line to Mississippi River	A B C	100	75	5.0	6.0-8.5	1	32	500
070502	Thompson Creek–From Mississippi state line to Mississippi River	A B C	100	75	5.0	6.0-8.5	1	32	500
070503	Capitol Lake	A B C	75	120	5.0	6.0-8.5	1	32	400
070504	Monte Sano Bayou–From US-61 to Mississippi River [7], [8]	B L	[7]	[7]	3.0	6.0-9.0	1	35 [8]	[7]
070505	Tunica Bayou–From headwaters to Mississippi River	A B C	100	75	5.0	6.0-8.5	1	32	500
070601	Mississippi River Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A
Ouachita River Basin (08)									
080101	Ouachita River–From Arkansas state line to Columbia Lock and Dam	A B C D	160	35	[15]	6.0-8.5	1	33	350
080102	Bayou Chauvin–From headwaters to Ouachita River	A B C	160	35	5.0	6.0-8.5	1	33	350
080201	Ouachita River–From Columbia Lock and Dam to Jonesville	A B C	160	50	5.0	6.0-8.5	1	33	400
080202	Bayou Louis–From headwaters to Ouachita River	A B C	250	75	5.0	6.0-8.5	1	32	500
080203	Lake Louis	A B C	250	75	5.0	6.0-8.5	1	32	500
080301	Black River–From Jonesville to Corps of Engineers (USACE) Control Structure at Mile 25	A B C	95	20	5.0	6.0-8.5	1	32	265
080302	Black River–From USACE Control Structure to Red River	A B C	95	20	5.0	6.0-8.5	1	32	265
080401	Bayou Bartholomew–From Arkansas state line to Ouachita River (Scenic to Dead Bayou)	A B C G	55	35	5.0	6.0-8.5	1	32	420
080501	Bayou de L'Outre–From Arkansas state line to Ouachita River (Scenic)	A B C G	250	45	5.0	6.0-8.5	1	33	500
080601	Bayou D'Arbonne–From headwaters to Lake Claiborne	A B C	50	15	5.0	6.0-8.5	1	32	200
080602	Lake Claiborne	A B C D	50	15	5.0	6.0-8.5	1	32	200
080603	Bayou D'Arbonne–From Lake Claiborne to Bayou D'Arbonne Lake	A B C	50	15	5.0	6.0-8.5	1	32	200
080604	Bayou D'Arbonne Lake	A B C	50	15	5.0	6.0-8.5	1	32	200
080605	Bayou D'Arbonne–From Bayou D'Arbonne Lake to Ouachita River (Scenic)	A B C G	50	15	5.0	6.0-8.5	1	32	200
080606	Cypress Creek–From headwaters to Bayou D'Arbonne; includes Colvin Creek	A B C	65	10	5.0	6.0-8.5	1	32	160

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
080607	Corney Bayou–From Arkansas state line to Corney Lake (Scenic)	A B C G	160	25	5.0	6.0-8.5	1	32	300
080608	Corney Lake	A B C	160	25	5.0	6.0-8.5	1	32	300
080609	Corney Bayou–From Corney Lake to Bayou D'Arbonne Lake (Scenic)	A B C G	160	25	5.0	6.0-8.5	1	32	300
080610	Middle Fork Bayou D'Arbonne–From headwaters to Bayou D'Arbonne Lake (Scenic)	A B C G	50	15	[20]	6.0-8.5	1	32	200
080701	Bayou Desiard and Lake Bartholomew; also called Dead Bayou	A B C D	25	25	5.0	6.0-8.5	1	32	100
080801	Cheniere Creek–From headwaters to Cheniere Brake Lake	A B C	25	25	5.0	6.0-8.5	1	32	100
080802	Cheniere Brake Lake	A B C	25	25	5.0	6.0-8.5	1	32	100
080901	Boeuf River–From Arkansas state line to Ouachita River	A B C	105	45	5.0	6.0-8.5	1	32	430
080902	Bayou Bonne Idee–From headwaters to Boeuf River	A B C	20	10	5.0	6.0-8.5	1	32	180
080903	Big Creek–From headwaters to Boeuf River; includes Big Colewa Bayou	A B C	230	75	5.0	6.0-8.5	1	32	635
080904	Bayou Lafourche–From near Oakridge to Boeuf River near Columbia	A B C	500	200	5.0	6.0-8.5	1	32	1,500
080905	Turkey Creek–From headwaters to Turkey Creek Cutoff; includes Turkey Creek Cutoff, Big Creek, and Glade Slough	B C	250	75	[2]	6.0-8.5	2	32	500
080906	Turkey Creek–From Turkey Creek Cutoff to Turkey Creek Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
080907	Turkey Creek Lake; includes outfall to Boeuf River	A B C	250	75	5.0	6.0-8.5	1	32	500
080908	Lake LaFourche	A B C	250	75	5.0	6.0-8.5	1	32	500
080909	Crew Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
080910	Clear Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
080911	Woolen Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
080912	Tisdale Brake and Staulkinghead Creek–From headwaters to Little Bayou Boeuf	B L	500	200	[13]	6.0-8.5	2	32	1,500
081001	Bayou Macon–From Arkansas state line to Tensas River	A B C	50	55	5.0	6.0-8.5	1	32	380
081002	Joe's Bayou–From headwaters to Bayou Macon	A B C	250	75	5.0	6.0-8.5	1	32	500
081003	Deer Creek–From headwaters to Boeuf River	B L	105	45	[13]	6.0-8.5	2	32	430
081101	Lake Providence	A B C	25	25	5.0	6.0-8.5	1	32	150
081201	Tensas River–From headwaters to Jonesville; includes Tensas Bayou	A B C	45	30	5.0	6.0-8.5	1	32	500
081202	Lake St. Joseph	A B C	25	25	5.0	6.0-8.5	1	32	150
081203	Lake Bruin	A B C D	25	25	5.0	6.0-8.5	1	32	150
081301	Little River–From Archie Dam to Ouachita River	A B C	95	10	5.0	6.0-8.5	1	32	265
081401	Dugdemona River–From headwaters to Big Creek	A B C	250	750	[14]	6.0-8.5	1	32	2,000
081402	Dugdemona River–From Big Creek to Little River	A B C	250	750	5.0	6.0-8.5	1	32	2,000
081501	Castor Creek–From headwaters to Little River	A B C	25	25	5.0	6.0-8.5	1	32	100
081502	Chatham Lake	A B C	25	25	5.0	6.0-8.5	1	32	100

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
081503	Beaucoup Creek–From headwaters to Castor Creek	A B C	25	25	[21]	6.0-8.5	1	32	100
081504	Flat Creek–From headwaters to Castor Creek	A B C	25	25	5.0	6.0-8.5	1	32	100
081505	Caney Lake	A B C	25	25	5.0	6.0-8.5	1	32	100
081601	Little River–From Castor Creek-Dugdemona confluence to Bear Creek (Scenic)	A B C G	250	500	5.0	6.0-8.5	1	33	1,000
081601-556716	Georgetown Reservoir	A B C G D	250	500	5.0	6.0-8.5	1	33	1,000
081602	Little River–From Bear Creek to Catahoula Lake (Scenic)	A B C G	50	75	5.0	6.0-8.5	1	33	260
081603	Catahoula Lake	A B C	50	75	5.0	6.0-8.5	1	33	260
081604	Catahoula Lake Diversion Canal–From Catahoula Lake to Black River	A B C	50	75	5.0	6.0-8.5	1	33	260
081605	Little River–From Catahoula Lake to Dam at Archie	A B C	50	75	5.0	6.0-8.5	1	33	260
081606	Fish Creek–From headwaters to Little River (Scenic)	A B C G	50	75	5.0	6.0-8.5	1	33	260
081607	Trout Creek–From headwaters to Little River (Scenic)	A B C G	50	75	5.0	6.0-8.5	1	33	260
081608	Big Creek–From headwaters to Little River (Scenic)	A B C D G	50	75	5.0	6.0-8.5	1	33	260
081609	Hemphill Creek–From headwaters to Catahoula Lake; includes Hair Creek	A B C	50	75	5.0	6.0-8.5	1	33	260
081610	Old River–From Catahoula Lake to Little River	A B C	250	75	5.0	6.0-8.5	1	32	500
081611	Bayou Funny Louis–From headwaters to Little River	A B C	50	75	5.0	6.0-8.5	1	33	260
Pearl River Basin (09)									
090101	Pearl River–From Mississippi state line to Pearl River Navigation Canal	A B C	20	15	5.0	6.0-8.5	1	32	180
090102	East Pearl River–From Holmes Bayou to I-10	A B C	20	15	5.0	6.0-8.5	1	32	180
090103	East Pearl River–From I-10 to Lake Borgne (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
090104	Peters Creek–From headwaters to Pearl River	A B C	20	30	5.0	6.0-8.5	1	30	150
090105	Pearl River Navigation Canal–From Pools Bluff to Lock No. 3	A B C	20	15	5.0	6.0-8.5	1	32	180
090106	Holmes Bayou–From Pearl River to West Pearl River (Scenic)	A B C G	20	15	5.0	6.0-8.5	1	32	180
090107	Pearl River–From Pearl River Navigation Canal to Holmes Bayou	A B C	20	15	5.0	6.0-8.5	1	32	180
090201	West Pearl River–From headwaters to Holmes Bayou (Scenic)	A B C G	20	15	5.0	6.0-8.5	1	32	180
090202	West Pearl River–From Holmes Bayou to The Rigolets; includes east and west mouths (Scenic)	A B C G	90	20	5.0	6.0-8.5	1	32	235
090202-5126	Morgan River–From Porters River to West Pearl River (Scenic)	A B C G	90	20	5.0	6.0-8.5	1	32	235
090203	Lower Bogue Chitto–From Pearl River Navigation Canal to Wilsons Slough	A B C	15	10	5.0	6.0-8.5	1	32	105
090204	Pearl River Navigation Canal–From below Lock No. 3	A B C	15	10	5.0	6.0-8.5	1	32	105
090205	Wilson Slough–From Bogue Chitto to West Pearl River (Scenic)	A B C G	15	10	5.0	6.0-8.5	1	32	105
090206	Bradley Slough–From Bogue Chitto to West Pearl River (Scenic)	A B C G	15	10	5.0	6.0-8.5	1	32	105
090207	Middle Pearl River and West Middle Pearl River–From West Pearl River to Little Lake	A B C	90	20	5.0	6.0-8.5	1	32	235
090207-5112	Morgan Bayou–From headwaters near I-10 to Middle River	A B C	90	20	5.0	6.0-8.5	1	32	235

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
090208	Little Lake (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
090301	Pushepatapa Creek–From headwaters and tributaries at Mississippi state line to Pearl River floodplain (Scenic)	A B C G	15	12	5.0	6.0-8.5	1	35	105
090401	Bogue Lusa Creek–From headwaters to Pearl River floodplain	A B C	30	45	5.0	6.0-8.5	1	32	300
090501	Bogue Chitto River–From Mississippi state line to Pearl River Navigation Canal (Scenic)	A B C G	15	10	5.0	6.0-8.5	1	35	105
090502	Big Silver Creek–From headwaters to Bogue Chitto River	A B C	15	10	5.0	6.0-8.5	1	35	105
090503	Little Silver Creek–From headwaters to Bogue Chitto River	A B C	15	10	5.0	6.0-8.5	1	35	105
090504	Lawrence Creek–From headwaters to Bogue Chitto River	A B C	15	10	5.0	6.0-8.5	1	35	105
090505	Bonner Creek–From headwaters to Bogue Chitto River	A B C	15	10	5.0	6.0-8.5	1	35	105
090506	Thigpen Creek–From headwaters to Bogue Chitto River	A B C	15	10	5.0	6.0-8.5	1	35	105
Red River Basin (10)									
100101	Red River–From Arkansas state line to US-165 in Alexandria	A B C D F	185	110	5.0	6.0-8.5	1	34	780
100201	Red River–From US-165 to Old River Control Structure Outflow Channel	A B C	185	110	5.0	6.0-8.5	1	34	780
100202	Little River–From headwaters to Old River near Marksville	A B C	250	75	5.0	6.0-8.5	1	32	500
100203	Old River; includes associated water bodies in Spring Bayou WMA; also called LaVielle Riviere	A B C	250	75	5.0	6.0-8.5	1	32	500
100301	Black Bayou–From Texas state line to LA-1 at Black Bayou Lake	A B C F	250	25	5.0	6.0-8.5	1	33	500
100302	Black Bayou Lake–From LA-1 to spillway	A B C	250	25	5.0	6.0-8.5	1	33	500
100303	Black Bayou–From spillway at Black Bayou Lake to Twelve Mile Bayou	A B C	250	25	5.0	6.0-8.5	1	33	500
100304	Twelve Mile Bayou–From headwaters to Red River	A B C D F	175	75	5.0	6.0-8.5	1	32	500
100305	Mahlin Bayou and McCain Creek–From headwaters to Twelve Mile Bayou	B L	175	75	[14]	6.0-8.5	2	32	500
100306	Kelly Bayou–From Arkansas state line to Black Bayou	A B C F	90	40	5.0	6.0-8.5	1	33	665
100307	Caddo Lake–From Texas state line to spillway; includes James Bayou	A B C D F	120	35	5.0	6.0-8.5	1	34	325
100308	Paw Paw Bayou–From Texas state line to Cross Lake; includes tributaries	A B C D F	75	25	5.0	6.0-8.5	1	32	150
100309	Cross Bayou–From Texas state line to Cross Lake	A B C D F	75	25	5.0	6.0-8.5	1	32	150
100310	Cross Lake	A B C D F	75	25	5.0	6.0-8.5	1	32	150
100401	Bayou Bodcau–From Arkansas state line to Red Chute Bayou at Cypress Bayou confluence	A B C F	250	75	5.0	6.0-8.5	1	32	800
100402	Red Chute Bayou–From Cypress Bayou to Flat River	A B C	250	75	[14]	6.0-8.5	1	32	800
100403	Cypress Bayou–From headwaters to Cypress Bayou Reservoir	A B C F	100	25	5.0	6.0-8.5	1	32	300
100404	Cypress Bayou Reservoir	A B C D F	100	25	5.0	6.0-8.5	1	32	300
100405	Black Bayou–From headwaters to spillway at Black Bayou Reservoir; includes Black Bayou Reservoir	A B C F	100	25	5.0	6.0-8.5	1	32	300
100406	Flat River–From headwaters to Loggy Bayou	A B C	250	75	5.0	6.0-8.5	1	32	300

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
100501	Bayou Dorcheat–From Arkansas state line to Lake Bistineau (Scenic)	A B C F G	250	25	5.0	6.0-8.5	1	33	440
100502	Lake Bistineau	A B C F	250	25	5.0	6.0-8.5	1	33	440
100503	Caney Creek–From headwaters to Bayou Dorcheat; excludes Caney Lake	A B C F	250	75	5.0	6.0-8.5	1	32	500
100504	Caney Lake	A B C F	250	75	5.0	6.0-8.5	1	32	500
100505	Loggy Bayou–From Lake Bistineau dam to Flat River	A B C F	75	35	5.0	6.0-8.5	1	32	250
100506	Loggy Bayou–From Flat River to Red River	A B C F	250	75	5.0	6.0-8.5	1	32	800
100601	Bayou Pierre–From headwaters to Bayou Pierre	A B C F	150	75	5.0	6.0-8.5	1	32	500
100602	Boggy Bayou–From headwaters to Wallace Lake	A B C F	150	75	5.0	6.0-8.5	1	32	500
100603	Wallace Lake	A B C F	150	75	5.0	6.0-8.5	1	32	500
100604	Wallace Bayou–From Wallace Lake to Bayou Pierre	A B C F	150	75	5.0	6.0-8.5	1	32	500
100605	Clear Lake and Smithport Lake; includes old Edwards Lake	A B C F	250	75	5.0	6.0-8.5	1	32	500
100606	Bayou Pierre–From Sawing Lake to Red River	A B C F	150	75	5.0	6.0-8.5	1	32	500
100701	Black Lake Bayou–From headwaters to 1 mile north of confluence with Leatherman Creek	A B C F	26	9	5.0	6.0-8.5	1	32	79
100702	Black Lake Bayou–From 1 mile north of Leatherman Creek to Black Lake (Scenic)	A B C F G	26	9	5.0	6.0-8.5	1	32	79
100703	Black Lake and Clear Lake	A B C D F	26	9	5.0	6.0-8.5	1	32	79
100704	Kepler Creek–From headwaters to Kepler Lake	A B C F	25	25	5.0	6.0-8.5	1	32	79
100705	Kepler Lake	A B C F	25	25	5.0	6.0-8.5	1	32	79
100706	Kepler Creek–From Kepler Lake to Black Lake Bayou	A B C F	25	25	5.0	6.0-8.5	1	32	79
100707	Castor Creek–From headwaters to Black Lake Bayou	A B C	26	9	5.0	6.0-8.5	1	32	79
100708	Castor Creek Tributary–From headwaters to Castor Creek	B C	26	9	[2]	6.0-8.5	2	32	79
100709	Grand Bayou–From headwaters to Black Lake Bayou	A B C D	26	9	5.0	6.0-8.5	1	32	79
100710	Grand Bayou Tributary–From headwaters to Grand Bayou	B C	26	9	[2]	6.0-8.5	2	32	79
100801	Saline Bayou–From headwaters near Arcadia to Saline Lake (Scenic)	A B C F G	110	20	5.0	6.0-8.5	1	32	250
100802	Saline Lake	A B C F	110	20	5.0	6.0-8.5	1	32	250
100803	Saline Bayou–From Saline Lake to Red River	A B C F	110	20	5.0	6.0-8.5	1	32	250
100804	Saline Bayou Tributary–From headwaters to Saline Bayou near Arcadia	B C	110	20	[2]	6.0-8.5	2	32	250
100901	Nantaches Creek–From headwaters to Nantaches Lake	A B C F	25	25	5.0	6.0-8.5	1	32	100
100902	Nantaches Lake	A B C F	25	25	5.0	6.0-8.5	1	32	100
100903	Bayou Nantaches–From Nantaches Lake to Red River	A B C F	25	25	5.0	6.0-8.5	1	32	100
101001	Sibley Lake	A B C D F	25	25	5.0	6.0-8.5	1	32	100
101101	Cane River–From above Natchitoches to Red River	A B C F	25	25	5.0	6.0-8.5	1	32	100

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
101102	Kisatchie Bayou–From headwaters to Kisatchie National Forest	A B C F	25	25	5.0	6.0-8.5	1	32	100
101103	Kisatchie Bayou–From Kisatchie National Forest to Old River (Scenic)	A B C F G	25	25	5.0	6.0-8.5	1	32	100
101201	Cotile Reservoir	A B C	50	25	5.0	6.0-8.5	1	32	200
101301	Rigolette Bayou–From headwaters to Red River	A B C F	25	25	5.0	6.0-8.5	1	32	100
101302	Iatt Lake	A B C F	25	25	5.0	6.0-8.5	1	32	100
101303	Iatt Creek–From headwaters to Iatt Lake	A B C F	25	25	5.0	6.0-8.5	1	32	100
101401	Buhlow Lake near Pineville	A B C	100	50	5.0	6.0-8.5	1	32	250
101501	Big Saline Bayou–From Catahoula Lake to Saline Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
101502	Saline Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
101504	Saline Bayou–From Larto Lake to Saline Lake (Scenic)	A B C G	45	10	5.0	6.0-8.5	1	32	165
101505	Larto Lake	A B C	45	10	5.0	6.0-8.5	1	32	165
101506	Big Creek–From headwaters to Saline Lake	A B C	45	10	5.0	6.0-8.5	1	32	165
101601	Bayou Cocodrie–From Little Cross Bayou to Wild Cow Bayou (Scenic)	A B C F G	250	75	5.0	6.0-8.5	1	32	500
101602	Cocodrie Lake	A B C	250	75	5.0	6.0-8.5	1	32	500
101603	Lake St. John	A B C	250	75	5.0	6.0-8.5	1	32	500
101604	Lake Concordia	A B C	250	75	5.0	6.0-8.5	1	32	500
101605	Bayou Cocodrie–From Lake Concordia to LA-15	A B C	250	75	5.0	6.0-8.5	1	32	500
101606	Bayou Cocodrie–From Wild Cow Bayou to Red River	A B C	250	75	5.0	6.0-8.5	1	32	500
101607	Bayou Cocodrie–From LA-15 to Little Cross Bayou	B L	250	75	[13]	6.0-8.5	2	32	500
Sabine River Basin (11)									
110101	Toledo Bend Reservoir–From Texas-Louisiana state line to Toledo Bend Dam	A B C D F	120	60	5.0	6.0-8.5	1	34	500
110201	Sabine River–From Toledo Bend Dam to Old River below Sabine Island WMA	A B C	120	60	5.0	6.0-8.5	1	33	500
110202	Pearl Creek–From headwaters to Sabine River (Scenic)	A B C G	120	60	5.0	6.0-8.5	1	33	500
110301	Sabine River–From Old River below Sabine Island WMA to Sabine Lake (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
110302	Black Bayou–From Pirogue Ditch to Sabine Lake (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	32	N/A
110303	Sabine Lake (Estuarine)	A B C E	N/A	N/A	4.0	6.0-8.5	4	35	N/A
110304	Sabine Pass (Estuarine)	A B C E	N/A	N/A	4.0	6.5-9.0	4	35	N/A
110401	Bayou Toro–From headwaters to LA-473	A B C	25	25	5.0	6.0-8.5	1	32	150
110402	Bayou Toro–From LA-473 to Sabine River	A B C	25	25	5.0	6.0-8.5	1	32	150
110501	West Anacoco Creek–From headwaters to Vernon Lake	A B C	15	10	5.0	6.0-8.5	1	32	90
110502	East Anacoco Creek–From headwaters to Vernon Lake	A B C	15	10	5.0	6.0-8.5	1	32	90
110503	Vernon Lake	A B C	15	10	5.0	6.0-8.5	1	32	90

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
110504	Bayou Anacoco–From Vernon Lake to Anacoco Lake	A B C	15	10	5.0	6.0-8.5	1	32	90
110505	Anacoco Lake	A B C	15	10	5.0	6.0-8.5	1	32	90
110506	Bayou Anacoco–From Anacoco Lake to Cypress Creek	A B C	15	10	5.0	6.0-8.5	1	32	90
110507	Bayou Anacoco–From Cypress Creek to Sabine River	A B C	150	300	5.0	6.0-8.5	1	32	1,000
110601	Vinton Waterway–From Vinton to ICWW (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
110602	Black Bayou–From ICWW to Pirogue Ditch (Estuarine)	A B C	N/A	N/A	4.0	6.0-8.5	1	35	N/A
110701	Sabine River Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A
Terrebonne Basin (12)									
120102	Bayou Poydras–From headwaters to Bayou Choctaw	A B C	250	75	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	500
120103	Bayou Choctaw–From Bayou Poydras to Bayou Grosse Tete	A B C	250	75	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	500
120104	Bayou Grosse Tete–From headwaters to ICWW near Wilbert Canal	A B C	25	25	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	200
120105	Chamberlin Canal–From Chamberlin to Bayou Choctaw	A B C	250	75	5.0	6.0-8.5	1	32	500
120106	Bayou Plaquemine–From Plaquemine Lock to ICWW	A B C	250	75	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	500
120107	Upper Grand River and Lower Flat River–From headwaters to ICWW	A B C	250	75	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	500
120108	False River	A B C	25	25	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	200
120109	Intracoastal Waterway–From Port Allen Locks to Bayou Sorrel Locks	A B C D	60	40	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	300
120110	Bayou Cholpe–From headwaters to Bayou Choctaw	A B C	25	25	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	200
120111	Bayou Maringouin–From headwaters to East Atchafalaya Basin Levee	A B C	25	25	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	200
120201	Lower Grand River and Belle River–From Bayou Sorrel Lock to Lake Palourde; includes Bay Natchez, Lake Natchez, Bayou Milhomme, and Bayou Long	A B C	60	40	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	300
120202	Bayou Black–From ICWW to Houma	A B C D	85	40	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	500
120203	Bayou Boeuf–From Lake Palourde to ICWW	A B C D	250	75	5.0	6.0-8.5	1	32	500

Table 3. Numerical Criteria and Designated Uses

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
120204	Lake Verret and Grassy Lake	A B C	100	75	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	350
120205	Lake Palourde	A B C D	100	75	3.3 April-Sept.; 5.0 Oct.-Mar.	6.0-8.5	1	32	350
120206	Grand Bayou and Little Grand Bayou–From headwaters to Lake Verret	A B C	60	40	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	300
120207	Thibodaux Swamp–Forested wetland located in Lafourche and Terrebonne Parishes, 6.2 miles southwest of Thibodaux, east of Terrebonne-Lafourche Drainage Canal, and north of Southern Pacific Railroad; also called Pointe Au Chene Swamp	B C	[5]	[5]	[5]	[5]	2	[5]	[5]
120208	Bayou Ramos Swamp Wetland–Forested wetland located 1.25 miles north of Amelia in St. Mary Parish, south of Lake Palourde	B C	[18]	[18]	[18]	[18]	2	[18]	[18]
120301	Bayou Terrebonne–From Thibodaux to ICWW in Houma	A B C	540	90	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.0-8.5	1	32	1,350
120302	Bayou Folse–From headwaters to Company Canal	A B C D F	500	150	5.0	6.5-9.0	1	32	1,000
120303	Bayou L'eau Bleu–From Company Canal to ICWW	A B C	500	150	2.3 Mar.-Nov.; 5.0 Dec.-Feb.	6.5-9.0	1	32	1,000
120304	Intracoastal Waterway–From Houma to Larose	A B C D F	250	75	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	1	32	500
120401	Bayou Penchant–From Bayou Chene to Lake Penchant	A B C G	500	150	5.0	6.5-9.0	1	32	1,000
120402	Bayou Chene–From ICWW to Bayou Penchant	A B C	250	75	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-8.0	1	32	500
120403	Intracoastal Waterway–From Bayou Boeuf Locks to Bayou Black in Houma; includes segments of Bayous Boeuf, Black, and Chene	A B C D F	250	75	3.8 June-Aug.; 4.0 Sept.-May	6.5-8.5	1	32	500
120404	Lake Penchant	A B C	500	150	5.0	6.5-9.0	1	32	1,000
120405	Lake Hache and Lake Theriot	A B C	500	150	5.0	6.0-8.5	1	32	1,000
120406	Lake de Cade	A B C E	N/A	N/A	5.0	6.0-9.0	4	35	N/A
120501	Bayou Grand Caillou–From Houma to Bayou Pelton	A B C	500	150	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-8.5	1	32	1,000
120502	Bayou Grand Caillou–From Bayou Pelton to Houma Navigation Canal (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	35	N/A
120503	Bayou Petit Caillou–From Bayou Terrebonne to LA-24 bridge	A B C E	500	150	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-9.0	4	32	1,000

Table 3. Numerical Criteria and Designated Uses

A-Primary Contact Recreation; B-Secondary Contact Recreation; C-Fish And Wildlife Propagation; L-Limited Aquatic Life and Wildlife Use; D-Drinking Water Supply; E-Oyster Propagation; F-Agriculture; G-Outstanding Natural Resource Waters

Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
120504	Bayou Petit Caillou–From LA-24 bridge to Boudreaux Canal (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-9.0	4	32	N/A
120505	Bayou Du Large–From Houma to Marmande Canal	A B C	500	150	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	1	32	1,000
120506	Bayou Du Large–From Marmande Canal to 1/2 mile north of St. Andrews Mission (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-9.0	4	35	N/A
120507	Bayou Chauvin–From Ashland Canal to Lake Boudreaux (Estuarine)	A B C	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	1	32	N/A
120508	Houma Navigation Canal–From Bayou Pelton to 1 mile south of Bayou Grand Caillou (Estuarine)	A B C E	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	4	35	N/A
120509	Houma Navigation Canal–From Houma to Bayou Pelton	A B C D	500	150	3.8 June-Aug.; 4.0 Sept.-May	6.0-8.5	1	32	1,000
120601	Bayou Terrebonne–From Houma to Company Canal (Estuarine)	A B C	445	105	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-9.0	1	32	1,230
120602	Bayou Terrebonne–From Company Canal to Humble Canal (Estuarine)	A B C E	5,055	775	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	32	10,000
120603	Company Canal–From ICWW to Bayou Terrebonne	A B C	500	150	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	1	32	1,000
120604	Bayou Blue–From ICWW to Grand Bayou Canal	A B C	445	105	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	1	32	1,000
120605	Bayou Pointe Au Chien–From headwaters to St. Louis Canal	A B C	445	105	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	1	32	1,000
120606	Bayou Blue–From Grand Bayou Canal to Bully Camp Canal (Estuarine)	A B C	5,055	775	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	1	32	10,000
120701	Bayou Grand Caillou–From Houma Navigation Canal to Caillou Bay (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	35	N/A
120702	Bayou Petit Caillou–From Boudreaux Canal to Houma Navigation Canal (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-9.0	4	32	N/A
120703	Bayou Du Large–From 1/2 mile north of St. Andrews Mission to Caillou Bay (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.0-9.0	4	35	N/A
120704	Bayou Terrebonne–From Humble Canal to Lake Barre (Estuarine)	A B C E	N/A	N/A	3.8 April-Aug.; 5.0 Sept.-Mar.	6.5-9.0	4	35	N/A

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Code	Stream Description	Designated Uses	Numerical Criteria						
			CL	SO_4	DO	pH	BAC	°C	TDS
120705	Houma Navigation Canal–From 1/2 mile south of Bayou Grand Caillou to Terrebonne Bay (Estuarine)	A B C E	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	4	35	N/A
120706	Bayou Blue–From Bully Camp Canal to Lake Raccourci (Estuarine)	A B C E	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.5-9.0	4	35	N/A
120707	Lake Boudreaux	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
120708	Lost Lake and Four League Bay	A B C E	N/A	N/A	5.0	6.0-9.0	4	35	N/A
120709	Bayou Petite Caillou–From Houma Navigation Canal to Terrebonne Bay	A B C E	N/A	N/A	3.8 June-Aug.; 4.0 Sept.-May	6.0-9.0	4	32	N/A
120801	Caillou Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
120802	Terrebonne Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
120803	Timbalier Bay	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
120804	Lake Barre	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
120805	Lake Pelto	A B C E	N/A	N/A	5.0	6.5-9.0	4	35	N/A
120806	Terrebonne Basin Coastal Bays and Gulf Waters to the State 3 mile limit	A B C E	N/A	N/A	5.0	6.5-9.0	4	32	N/A

ENDNOTES:

[1] Designated Naturally Dystrophic Waters Segment; Seasonal DO Criteria: 5.0 mg/L November-April, 3.5 mg/L May-October.

[2] Designated Intermittent Stream; Seasonal DO Criteria: 5.0 mg/L November-April, 2.0 mg/L May-October; Seasonal Water Uses: All uses November-April, No uses May-October.

[3] Designated Naturally Dystrophic Waters Segment; Seasonal DO Criteria: 5.0 mg/L December-February, 3.0 mg/L March-November.

[4] Designated Man-Made Water body; Seasonal DO Criteria: 4.0 mg/L November-March, 2.5 mg/L April-October; Subcategory Fish and Wildlife Use, Blue Crab Use.

[5] Designated Naturally Dystrophic Waters Segment—Not Available (N/A); the following criteria are applicable:

(a) No more than 20 percent decrease in naturally occurring litter fall or stem growth;

(b) No significant decrease in the dominance index or stem density of bald cypress;

(c) No significant decrease in faunal species diversity and no more than a 20 percent decrease in biomass.

[6] Site-Specific Seasonal DO Criteria: 5 mg/L January-April, 3.5 mg/L May-December.

[7] Designated Man-Made Water body; Cl, SO4, and TDS levels will not cause acute toxicity to the limited wildlife and aquatic life community established in the designated Monte Sano Bayou subsegment. Aquatic Life Acute Criteria will apply and Human Health Criteria will be calculated with Secondary Contact Recreation Criteria and 6.5 g/day fish consumption rate.

[8] The temperature differential limit of 2.8°C is not applicable to this water body subsegment.

[9] Site-Specific DO Criteria.

[10] Scenic River Segment limited to: Junction with Whiskey Chitto Creek to confluence with Marsh Bayou.

[11] Scenic River Segment limited to: Confluence with Marsh Bayou to Ward 8 Park in Calcasieu Parish above Moss Bluff.

[12] Scenic River Segment limited to: Confluence of East and West Prong to La. Hwy. 437, north of Covington.

[13] Site-Specific Seasonal DO Criteria: 3 mg/L November-April, 2 mg/L May-October.

[14] Site-Specific Seasonal DO Criteria: 5 mg/L November-April, 3 mg/L May-October.

[15] Site-Specific Seasonal DO Criteria: 3 mg/L June and July, 4.5 mg/L August, 5 mg/L September through May. These seasonal criteria may be unattainable during or following naturally occurring high flow (when the gage at the Felsenthal Dam exceeds 65 feet and also for the two weeks following the recession of flood waters below 65 feet), which may occur from May through August. Naturally occurring conditions that fail to meet criteria should not be interpreted as violations of the criteria.

[16] Designated Naturally Dystrophic Waters Segment; Seasonal DO Criteria: 5 mg/L December-February, 3 mg/L March- November.

[17] Designated Naturally Dystrophic Waters Segment. The following criteria are applicable:

(a) No more than 50 percent reduction in the wetlands faunal assemblage total abundance, total abundance of dominant species, or the species richness of fish and macroinvertebrates, minimum of five replicate samples per site; p = 0.05.

(b) No more than 20 percent reduction in the total above-ground wetland productivity as measured by tree, shrub, and/or marsh grass productivity.

[18] Designated Naturally Dystrophic Waters Segment. The following criteria are applicable:

(a) No more than 20 percent decrease in naturally occurring litter fall or stem growth;

(b) No significant decrease in the dominance index or stem density of bald cypress;

(c) No significant decrease in faunal species diversity and no more than a 20 percent decrease in abundance.

[19] Designated Naturally Dystrophic Waters Segment; Seasonal DO Criteria: 5 mg/L November-March, 3.5 mg/L April-October.

[20] Designated Naturally Dystrophic Waters Segment; Seasonal DO Criteria: 5 mg/L October-June, 3 mg/L July-September.

[21] Designated Naturally Dystrophic Waters Segment; Seasonal DO Criteria: 5 mg/L October-June, 2.5 mg/L July-September.

[22] Site-Specific Seasonal DO Criteria: 3 mg/L May-September, 5 mg/L October-April.

[23] Designated Naturally Dystrophic Waters Segment. The following criteria apply: no more than 20% reduction in the total above-ground wetland productivity as measured by tree, shrub, and/or marsh grass productivity.

[24] Designated Man-Made Water Bodies; Seasonal DO Criteria: 3.0 mg/L November-April, 2.0 mg/L May-October; Rodere Canal and Commercial Canal have BAC 2; Port Canal and New Iberia Southern Drainage Canal have BAC 1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2074(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 15:738 (September 1989), amended LR 17:264 (March 1991), LR 20:431 (April 1994), LR 20:883 (August 1994), LR 21:683 (July 1995), LR 22:1130 (November 1996), LR 24:1926 (October 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:2405 (December 1999), LR 27:289 (March 2001), LR 28:462 (March 2002), LR 28:1762 (August 2002), LR 29:1814, 1817 (September 2003), LR 30:1474 (July 2004), amended by the Office of Environmental Assessment, LR 30:2468 (November 2004), LR 31:918, 921 (April 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 32:815, 816, 817 (May 2006), LR 33:832 (May 2007), LR 34:1901 (September 2008), LR 35:446 (March 2009), repromulgated LR 35:655 (April 2009), amended LR 36:2276 (October 2010).