EPA has reviewed the State of Louisiana's 2014 § 303(d) list submission and has concluded that the state developed its § 303(d) list in partial compliance with § 303(d) of the Clean Water Act (CWA) and 40 CFR 130.7. EPA has determined that Louisiana's submission does not appear to include all waters that meet § 303(d) listing requirements. Therefore, EPA is partially approving and proposing to partially disapprove Louisiana's list submission. The proposed 2014 § 303(d) list includes the list submitted by the State of Louisiana in addition to the following waterbody segments:

- Three (3) coastal segments due to non-attainment of dissolved oxygen criterion.
- Thirty eight (38) segments due to non-attainment of mineral(s) criteria.
- Two (2) segments due to non-attainment of turbidity criterion.

EPA's rationale for partially approving and proposing to partially disapprove Louisiana's list submission is found below.

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Abbreviations

CALM - Consolidated Assessment and Listing Methodology

CFR – Code of Federal Regulations

CPP – Continuing Planning Process

CWA – Clean Water Act or (Act)

EPA – Environmental Protection Agency

LDEQ - Louisiana Department of Environmental Quality

LDHH – Louisiana Department of Health and Hospitals

LDWF – Louisiana Department of Wildlife and Fisheries

LUMCON – Louisiana Universities Marine Consortium

NOAA – National Oceanic and Atmospheric Administration

SEAMAP – Southeast Area Monitoring and Assessment Program

TMDL - Total Maximum Daily Load

WQLS – Water Quality Limited Segments

WQMP – Water Quality Management Plan

A. Purpose

The purpose of this review document is to describe the rationale for EPA's partial approval and proposed partial disapproval of the State of Louisiana 2014 § 303(d) list of water quality limited segments (WQLS) requiring total maximum daily loads (TMDLs). The following sections identify those key elements to be included in the list submittal based on the CWA and EPA regulations. See 40 CFR § 130.7. EPA reviewed the methodology used by Louisiana in developing the § 303(d) list and the description of the data and information the state considered. EPA's review of the State of Louisiana 2014 § 303(d) list was based on whether the state considered existing and readily available water quality related data and information and reasonably identified waters required to be listed.

B. Statutory and Regulatory Background

B.1 Identification of WQLSs for Inclusion on Section 303(d) List

Section 303(d)(1)(A) of the Act directs:

"Each State shall identify those waters within its boundary for which effluent limitations required by $\S 301(b)(1)(A)$ and (B) are not stringent enough to implement any water quality standard applicable to such waters."

The § 303(d) listing requirements apply to waters impaired by point and/or nonpoint source pollutants. EPA regulations at 40 CFR § 130.7 (b)(1) require:

"Each State shall identify those water quality-limited segments still requiring TMDLs within its boundaries for which: (i) Technology-based effluent limitations required by sections

301(b), 306, 307, or other sections of the Act; (ii) More stringent effluent limitations (including prohibitions) required by either State or local authority preserved by section 510 of the Act, or Federal authority (law, regulation, or treaty); and (iii) Other pollution control requirements (e.g., best management practices) required by local, State, or Federal authority are not stringent enough to implement any water quality standards (WQS) applicable to such waters."

Section 303(d)(1)(B) of the Act directs:

"Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 301 are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife."

EPA regulations at 40 CFR § 130.7 (b)(2) require:

"Each State shall also identify on the same list developed under paragraph (b)(1) of this section those water quality-limited segments still requiring TMDLs or parts thereof within its boundaries for which controls on thermal discharges under section 301 or State or local requirements are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish and wildlife."

EPA regulations at 40 CFR § 130.7 (b)(4) require:

"The list required under §§ 130.7(b)(1) and 130.7(b)(2) of this section shall include a priority ranking for all listed water quality-limited segments still requiring TMDLs, taking into account the severity of the pollution and the uses to be made of such waters and shall identify the pollutants causing or expected to cause violations of the applicable water quality standards."

EPA regulations at 40 CFR § 130.7 (b)(6) require:

"Each State shall provide documentation to the Regional Administrator to support the State's determination to list or not list its waters as required by §§ 130.7(b)(1) and 130.7(b)(2). This documentation shall include as a minimum: (i) A description of the methodology used to develop the list;".

EPA regulations at 40 CFR § 130.7 (d)(2) require:

"The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission. The Regional Administrator shall approve a list developed under § 130.7(b) that is submitted after the effective date of this rule only if it meets the requirements of § 130.7(b). If the Regional Administrator approves such listing and loadings, the State shall incorporate them into its current WQM plan. If the Regional Administrator disapproves such listing and loadings, he shall, not later than 30 days after the date of such disapproval, identify such waters in such State and establish such loads for such waters as determined necessary to implement applicable WQS. The Regional Administrator shall promptly issue a public notice seeking comment on such listing and loadings. After considering public comment and making any revisions he deems appropriate, the Regional Administrator shall transmit the list and loads to the State, which shall incorporate them into its current WQM plan."

B.2 Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA regulations at 40 CFR § 130.7 (b)(5) require:

"Each state shall assemble and evaluate all existing and readily available water quality-related data and information to develop the list required by §§ 130.7(b)(1) and 130.7(b)(2). At a minimum 'all existing and readily available water quality-related data and information' includes but is not limited to all of the existing and readily available water qualityrelated data and information about the following categories of waters: (i) Waters identified by the State in its most recent section 305(b) report as 'partially meeting' or 'not meeting' designated uses or as 'threatened'; (ii) Waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards; (iii) Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or federal agencies; or academic institutions. These organizations and groups should be actively solicited for research they may be conducting or reporting. For example, university researchers, the United States Department of Agriculture, the National Oceanic and Atmospheric Administration, the United States Geological Survey, and the United States Fish and Wildlife Service are good sources of field data; and (iv) Waters identified by the State as impaired or threatened in a nonpoint assessment submitted to EPA under section 319 of the CWA or in any updates to the assessment."

A list of categories of water quality-related data and information that may be existing and readily available can be found in Appendix C of EPA's 1991 Guidance for Water Quality-Based Decisions ("EPA's 1991 Guidance").

EPA regulations at 40 CFR § 130.7 (b)(6) require:

"Each State shall provide documentation to the Regional Administrator to support the State's determination to list or not list its waters as required by §§ 130.7(b)(1) and 130.7(b)(2). This documentation shall include as a minimum:"

- (i) "A description of the methodology used to develop the list;" and
- (ii): "A description of the data and information used to identify waters, including a description of the data and information used by the State as required by $\S 130.7(b)(5)$;" and
- (iii) "A rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in § 130(b)(5);" and
- (iv) "Any other reasonable information requested by the Regional Administrator. Upon request by the Regional Administrator, each State must demonstrate good cause for not including a water or waters on the list. Good cause includes, but is not limited to, more recent or accurate data; more sophisticated water quality modeling; flaws in the original analysis that led to the water being listed in the categories in \S 130.7(b)(5); or changes in conditions, e.g., new control equipment, or elimination of discharges."

While the states are required to evaluate all existing and readily available water quality-related data and information in deciding whether to list their waters, 40 CFR § 130.7 (b)(6) allows states to decide to use or not use particular data or information in determining whether to list particular waters. 40 CFR § 130.7 (b)(6)(iii) requires states to provide a rationale for any decision not to use particular data and information.

B.3 Priority Ranking & Two Year TMDL Development

Section 303(d)(1)(A) of the Act directs:

"The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters."

EPA regulations at 40 CFR § 130.7 (b)(4) require:

"The list required under §§ 130.7(b)(1) and 130.7(b)(2) of this section shall include a priority ranking for all listed water quality-limited segments still requiring TMDLs, taking into account the severity of the pollution and the uses to be made of such waters and shall identify the pollutants causing or expected to cause violations of the applicable water quality standards. The priority ranking shall specifically include the identification of waters targeted for TMDL development in the next two years."

The states may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats; recreational, economic, and aesthetic importance of particular waters; degree of public interest and support; and the state or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance.

B.4 Public Participation

The process for identifying WQLSs requires the involvement of the general public commonly referred to as the public participation process. 40 C.F.R. § 130.7(a) requires the state to describe its process for involving the public and other stakeholders in the development of the § 303(d) list in its Continuing Planning Processes (CPP). Federal regulations at 40 CFR Part 25 titled "Public Participation in Programs under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act" govern the public participation requirements. EPA considers the TMDL program, including the states' development of § 303(d) lists, as a "covered activity" based on the activities described in the regulation.

EPA regulations at 40 CFR § 25.1(a) provide:

"Basic requirements and suggested program elements for public information, public notification, and public consultation are set forth in § 25.4. These requirements are intended to foster public awareness and open processes of government decision making. They are applicable to all covered activities described in § 25.2(a)."

EPA regulations at 40 CFR § 25.2(a) require in relevant part:

"The activities under the three Acts which are covered by this part are:

- ...(5) Development and implementation of plans, programs, standards, construction, and other activities supported with EPA financial assistance (grants and cooperative agreements) to State, interstate, regional and local agencies (herein referred to as "State, interstate and substate agencies");
- ...(8) Other activities which the Assistant Administrator for Water and Waste Management, the Assistant Administrator for Enforcement, or any EPA Regional Administrator deems appropriate in view of the Agency's responsibility to involve the public in significant decisions."

EPA regulations at 40 CFR § 25.3(a) require:

"EPA, State, interstate, and sub-state agencies carrying out activities described in § 25.2 (a) shall provide for, encourage and assist the participation of the public. The term 'the public' in the broadest sense means the people as a whole, the general populace. There are a number of identifiable, 'segments of the public' which may have a particular interest in a given program or decision. Interested and affected segments of the public may be affected directly by a decision, either beneficially or adversely; they may be affected directly; or they may have some other concern about the decision. In addition to private citizens, the public may include, among others, representatives of consumer, environmental, and minority associations; trade, industrial, agricultural, and labor organizations; public health, scientific, and professional societies; civic organizations; public officials; and governmental and educational associations."

EPA regulations at 40 CFR § 25.4(b)(5) require:

"Each agency shall develop and maintain a list of persons and organizations who have expressed an interest in or may, by the nature of their purposes, activities or members, be affected by or have an interest in any covered activity. Generally, this list will be most useful where subdivided by area of interest, or geographic area. Whenever possible the list should include representatives of the several categories of interests listed under § 25.3(a). Those on the list, or relevant portions if the list is subdivided, shall receive timely and periodic notification of the availability of materials under § 25.4(b)(2)."

EPA regulations at 40 CFR § 25.4(c) require:

"Public notification. Each agency shall notify interested and affected parties, including appropriate portions of the list required by paragraph (b)(5) of this section, and the media in advance of times at which major decisions not covered by notice requirements for public meetings or public hearings are being considered. Generally, notices should include the timetable in which a decision will be reached, the issues under considerations, any alternative courses of actions or tentative determinations which the agency has made, a brief listing of the applicable laws or regulations, the location where relevant documents may be reviewed or obtained, identification of any associated public participation opportunities such as workshops or meetings, the name of an individual to contact for additional information, and any other appropriate information. All advance notifications under this paragraph must be provided far

enough in advance to permit time for public response; generally this should not be less than 30 days."

EPA regulations at 40 CFR § 25.12(a)(1) require:

"EPA shall review the public participation work plan (or, if no work plan is required by this chapter for the particular financial assistance agreement, the public participation element) included in the application to determine consistency with all policies and requirements of this part."

EPA regulations at 40 CFR § 25.12(a)(2)(i) require:

"Evaluation. EPA shall evaluate compliance with public participation requirements using the work plan, responsiveness summary, and other available information. EPA will judge the adequacy of the public participation effort in relation to the objectives and requirements of § 25.3 and § 25.4 and other applicable requirements. In conducting this evaluation, EPA may request additional information from the assisted agency, including records of hearings and meetings, and may invite public comment on the agency's performance. The evaluation will be undertaken as part of any mid-project review required in various programs under this chapter; where no such review is required the review shall be conducted at an appropriate midpoint in continuing EPA oversight activity. EPA may, however, undertake such evaluation at any point in the project period, and will do so whenever it believes that an assisted agency may have failed to meet public participation requirements."

The evaluation of public participation is generally a financial assistance (grants and cooperative agreements) evaluation, however, the establishment of the 303(d) list is an activity that has a public participation component. The adequacy of the public participation effort is an appropriate analysis during the review of the § 303(d) list.

EPA's responsibility to ensure that states provide for adequate public participation in the development of § 303(d) lists is emphasized in the regulations at 40 CFR § 130.7, which requires states to explain their public participation procedures in regard to activities under CWA 303(d) in the state's Continuing Planning Process (CPP).

EPA regulations at 40 CFR § 130.7 (a) require:

"General. The process for identifying water quality limited segments still requiring wasteload allocations, load allocations and total maximum daily loads (WLAs/LAs and TMDLs), setting priorities for developing these loads; establishing these loads for segments identified, including water quality monitoring, modeling, data analysis, calculation methods, and list of pollutants to be regulated; submitting the State's list of segments identified, priority ranking, and loads established (WLAs, LAs/TMDLs) to EPA for approval; incorporating the approved loads into the State's WQM plans and NPDES permits; and involving the public, affected dischargers, designated areawide agencies, and local governments in this process shall be clearly described in the State Continuing Planning Process (CPP)." Emphasis Added

EPA regulations at 40 CFR § 130.5(a) require:

"General. Each State shall establish and maintain a continuing planning process (CPP) as described under section 303(e)(3)(A-H) of the Act. Each State is responsible for

managing its water quality program to implement the processes specified in the continuing planning process. EPA is responsible for periodically reviewing the adequacy of the State's CPP."

EPA Regulations at 40 CFR § 130.5(b) require:

- "Content. The State may determine the format of its CPP as long as the minimum requirements of the CWA and this regulation are met. The following processes must be described in each State CPP, and the State may include other processes at its discretion.
- (3) The process for developing total maximum daily loads (TMDLs) and individual water quality based effluent limitations for pollutants in accordance with section 303(d) of the Act and § 130.7(a) of this regulation."

C. Review of the Louisiana Submission

EPA partially approved and is proposing to partially disapprove the State of Louisiana 2014 § 303(d) list. EPA reviewed the State of Louisiana 2014 § 303(d) list and concluded that the state developed part of its § 303(d) list in compliance with § 303(d) of the Act and 40 CFR § 130.7. EPA determined that the Louisiana submission did not appear to include all waters that meet § 303(d) listing requirements. Therefore, EPA is proposing to disapprove the omission of 43 waterbody segments, constituting 93 segment-pollutant pairs, from the State of Louisiana 2014 § 303(d) list. Additionally, EPA is proposing to add the 43 segments and 93 segment-pollutant pairs to the State of Louisiana 2014 § 303(d) list. EPA is providing the public the opportunity to review and comment on its proposed additions to Louisiana's 2014 Section 303(d) list. EPA will consider and respond to public comments specific to the proposed addition of the 43 segments and associated pollutants before taking final action on Louisiana's 2014 Section 303(d) list. Notices announcing the availability of this decision document and requests for public comment regarding EPA's proposed additions were published in the Federal Register and Baton Rouge Advocate.

EPA's determination was based on its analysis of whether the state reasonably considered existing and readily available water quality related data and information, reasonably identified waters required to be listed, assigned a priority ranking, provided a list of TMDLs to be developed in the next two years and provided adequate public participation.

C.1 Review of Identification of WQLSs for Inclusion on Section 303(d) List

EPA determined that the State of Louisiana 2014 § 303(d) list does not include all waters that meet § 303(d) listing requirements.

EPA's partial approval and proposed partial disapproval of the State of Louisiana 2014 § 303(d) list is based on EPA's review of the data and information submitted concerning individual waters and the state's evaluations of those waters. EPA's evaluation was intended to determine whether the state had identified all waters that meet Federal listing requirements specified in section § 303(d) and 40 CFR § 130.7.

Louisiana combined the 2014 § 305(b) report and the § 303(d) list into a single report ("the Integrated Report") in accordance with EPA's listing guidance titled 'Guidance for the 2006 Integrated Assessment and Reporting on the Quality of states' Waters' ('EPA's 2006 Guidance'). (USEPA.2005 July.). A single assessment methodology for the Integrated Report was used for both the § 305(b) reporting and the § 303(d) listing activities. The Louisiana Integrated Report divided assessed waters into five categories as recommended by EPA's 2006 Guidance. The state added one subcategory within Category 5, which the state titled 5RC, or 5 *Revise Criteria*. Louisiana identified waterbodies in subcategory 5RC when impairments existed for one or more designated uses; however, current water quality criteria may be revised due to the possibility that naturally occurring conditions may be the source of the impairment(s).

Category 5 and associated subcategory 5RC, which includes waters for which available data and/or information indicate that at least one designated use is not being supported or is threatened, and for which a TMDL is needed, is the State of Louisiana 2014 § 303(d) list that EPA approves or disapproves pursuant to § 303(d)(2) and 40 CFR § 130.7. Category 5 is the portion of the Integrated Report on which EPA is acting.

C.2 Identification of WQLS for Minerals

EPA determined the Louisiana list partially identified the Water Quality Limited Segments for Chlorides, Sulfates and TDS (collectively termed "minerals") in need of TMDLs. However, EPA determined that the state failed to identify and include on its list 38 Water Quality Limited Segments in need of TMDLS for Chlorides, Sulfates and TDS. EPA is proposing to disapprove Louisiana's failure to list these segments, which are identified in Table 1.

The State did not identify these 38 segments on the LA 2014 § 303(d) list on the basis that support of minerals criteria could not be determined due to insufficient data. The state placed these segments into Category 3. Category 3 is reserved for waters where there is insufficient available data and/or information to make a use support determination. The State's rationale for placing the segments in Category 3 and not identifying the segments on the LA 2014 § 303(d) list is given in the 2014 Integrated Report and includes the following statements:

- "In an effort to improve the accuracy of water quality assessments, the LDEQ is evaluating alignment of assessment data and processes with the basis used for developing water quality criteria. For example, minerals criteria are based on long-term averages and variability; assessments to determine support of the fish and wildlife propagation use using minerals data are based on a short-term data set with a percent-based exceedance rate. Therefore, LDEQ is re-evaluating minerals criteria assessment processes and associated data sets and has determined insufficient data are available to determine attainment of uses and standards on select subsegments".
- "...it was determined that many of the criteria failures were due to natural tidal influences. In some cases, drought or tropical storms may have contributed to the tidal influences. Criteria failures for minerals occurred on many coastal subsegments not previously determined to be estuarine but still highly influenced by tides. Because these subsegments were not recognized as estuarine during criteria development, they may have been assigned excessively low criteria.

EPA does not agree that there is insufficient data to identify the segments on Louisiana's 2014 § 303(d) list for excessive minerals concentrations. EPA does not support Louisiana's suspension of the assessment methodology for select segments due to re-evaluation of minerals criteria assessment process and associated data sets.

The assessment methodology used by Louisiana for purposes of evaluating those waters with site specific minerals criteria for the Integrated Report defines a water as unimpaired for minerals (total dissolved solids and/or sulfates and/or chlorides) if less than or equal to 30% of the samples exceed site specific criteria. This assessment methodology is applied to a data set consisting of results from a series of daily grab samples collected generally once per month over a year. It is the state's position that for the segments identified in Table 1, the dataset is not adequate to compare to a criterion developed using a long-term (multi-year) average mineral concentration. However, this assessment methodology was applied to other segments and used to determine those particular segments were not exceeding minerals criteria. In those cases, data were sufficient to make a determination of use support. Additionally, for those segments identified in Table 1, the state provided no specific segment information to support the nonattainment due to natural conditions as defined in LAC 33:IX.1115.C. Until such a time when the state has finished evaluating minerals criteria assessment processes and associated data sets and finalized associated changes to the assessment methodology, the assessment methodology as described in Table 3.2.2 of the LA 2014 IR should be consistently applied to all segments for the purposes of determining use support.

As stated in EPA's comments submitted during the public comment period for the LA 2014 § 303(d) list, EPA acknowledges certain segments identified in Table 1 are potentially tidally influenced and that such waters create unique challenges in terms of application of minerals criteria. Additionally, EPA is supportive of Louisiana's efforts to examine the appropriateness of the minerals criteria as found in LAC 33:IX.1123, Table 3 and encourages re-evaluation of the criteria on a segment-by-segment (case-by-case) basis. Until such re-evaluations and potential revisions are addressed via processes outlined in LAC 33:IX.1113.A.3, water quality data must be assessed against current water quality standards as found in LAC 33:IX.1113.C.2. Segments cannot be placed into Category 3 due to disagreement with currently established water quality standards as defined in LAC 33:IX.1113.C.2, or in anticipation of possible future criteria revisions.

Table 1. Segments added to the 2014 § 303(d) list by EPA due to exceedance of minerals criteria.

Segment ID	LA Segment Number	Criteria Exceedance
Calcasieu River-From Marsh Bayou to saltwater barrier (Scenic)	LA030201_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Serpent	LA030701_00	Total Dissolved Solids
English Bayou-From headwaters to Calcasieu River	LA030702_00	Total Dissolved Solids

Segment ID	LA Segment Number	Criteria Exceedance
West Fork Calcasieu River-From confluence with Beckwith Creek and Hickory Branch to mainstem of Calcasieu River	LA030801_00	Chlorides, Sulfates, Total Dissolved Solids
Beckwith Creek-From headwaters to West Fork Calcasieu River	LA030803_00	Total Dissolved Solids
Houston River-From Bear Head Creek at LA-12 to West Fork Calcasieu River	LA030806_00	Chlorides, Sulfates, Total Dissolved Solids
Intracoastal Waterway-From Calcasieu Lock to East Calcasieu River Basin boundary	LA031101_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Manchac-From headwaters to Amite River	LA040201_00	Chlorides, Sulfates, Total Dissolved Solids
Amite River-From Amite River Diversion Canal to Lake Maurepas	LA040303_00	Chlorides, Total Dissolved Solids
Grays Creek-From headwaters to Amite River	LA040304_00	Chlorides, Sulfates, Total Dissolved Solids
Amite River Diversion Canal-From Amite River to Blind River	LA040402_00	Chlorides
Tickfaw River-From LA-42 to Lake Maurepas	LA040502_00	Chlorides, Sulfates, Total Dissolved Solids
Ponchatoula Creek and Ponchatoula River	LA040505_00	Total Dissolved Solids
Selsers Creek-From headwaters to South Slough	LA040603_00	Total Dissolved Solids
South Slough; includes Anderson Canal to I-55 borrow pit	LA040604_00	Chlorides, Total Dissolved Solids
Tangipahoa River-From I-12 to Lake Pontchartrain	LA040702_00	Chlorides, Sulfates, Total Dissolved Solids
Tchefuncte River-From LA-22 to Lake Pontchartrain (Estuarine)	LA040803_00	Chlorides, Total Dissolved Solids
Bayou Lacombe-From headwaters to US-190 (Scenic)	LA040901_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Lacombe-From US-190 to Lake Pontchartrain (Scenic) (Estuarine)	LA040902_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Cane-From headwaters to US-190 (Scenic)	LA040903_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Liberty-From headwaters to LA-433	LA040905_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Bonfouca-From headwaters to LA-433	LA040907_00	Chlorides, Sulfates, Total Dissolved Solids
Bonne Carre Spillway	LA041101_00	Chlorides, Sulfates, Total Dissolved Solids

Segment ID	LA Segment Number	Criteria Exceedance
Bayou Mallet-From headwaters to Bayou Des Cannes	LA050103_00	Total Dissolved Solids
Lake Arthur and Lower Mermentau River to Grand Lake	LA050402_00	Chlorides, Sulfates, Total Dissolved Solids
Lacassine Bayou-From headwaters to Grand Lake	LA050601_00	Chlorides, Sulfates, Total Dissolved Solids
Intracoastal Waterway-From Calcasieu Basin Boundary to Mermentau River	LA050602_00	Chlorides, Sulfates, Total Dissolved Solids
Bayou Chene-From headwaters to Lacassine Bayou; includes Bayou Grand Marais	LA050603_00	Sulfates
Intracoastal Waterway-From Mermentau River to Vermilion Locks	LA050702_00	Chlorides, Sulfates, Total Dissolved Solids
White Lake	LA050703_00	Sulfates
Vermilion River-From LA-3073 bridge to ICWW	LA060802_00	Total Dissolved Solids
East Pearl River-From Holmes Bayou to I-10	LA090102_00	Chlorides, Sulfates, Total Dissolved Solids
Middle Pearl River and West Middle Pearl River- From West Pearl River to Little Lake	LA090207_00	Chlorides, Sulfates, Total Dissolved Solids
Morgan Bayou-From headwaters near I-10 to Middle Pearl River	LA090207_ 5112	Chlorides, Sulfates, Total Dissolved Solids
Bayou Grand Caillou-From Houma to Bayou Pelton	LA120501_00	Chlorides, Total Dissolved Solids
Bayou Du Large-From Houma to Marmande Canal	LA120505_00	Chlorides, Total Dissolved Solids
Company Canal-From ICWW to Bayou Terrebonne	LA120603_00	Chlorides, Total Dissolved Solids
Bayou Pointe Au Chien-From headwaters to St. Louis Canal	LA120605_00	Chlorides, Sulfates, Total Dissolved Solids

C.3 Identification of WQLS for Dissolved Oxygen (Ammonia, BOD, CBOD)

EPA determined the Louisiana list partially identified the Water Quality Limited Segments for dissolved oxygen (DO) (ammonia, BOD and CBOD) in need of TMDLs. However, EPA determined the state failed to identify and include on its list three (3) Water Quality Limited Segments in need of TMDLs for DO (ammonia, BOD and CBOD). EPA is proposing to disapprove Louisiana's failure to list these segments, which are identified in Table 2.

Consistent with Louisiana's action on the 2012 Integrated Report, the State did not identify three coastal segments on the LA 2014 § 303(d) list on the basis that attainment/non-attainment of DO criteria could not be determined due to insufficient data. In the 2014 IR, the State outlined its rationale for not listing the segments and provided details of their rationale via a web link to the 2012 Integrated Report available at:

(http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/WaterQualityStandardsAssess ment/WaterQualityInventorySection305b/2012IntegratedReport.aspx).

EPA's proposal to disapprove the omission of segments 021102, 070601 and 120806 from the LA 2014 § 303(d) list on the basis of insufficient data is consistent with EPA's actions on the LA 2012 § 303(d) list. EPA does not agree that there is insufficient data to identify the segments on Louisiana's 2014 § 303(d) list for low dissolved oxygen. As described in EPA's 2008, 2010 and 2012 Louisiana § 303(d) list Records of Decision, approximately 231 DO measurements were collected at over 53 stations within state territorial waters. EPA determined these data were adequate to determine non-attainment of the marine DO criterion. In evaluating the data, EPA applied current Louisiana Water Quality Standards, 33 LAC Section 1113.C.3.c, established under § 303 of the CWA, including numeric criteria, narrative criteria, and waterbody uses. See CFR § 130.7(a)(3). Further, there is no new information included in the state's 2014 Integrated Report to indicate that conditions have changed such that the state's marine criterion for DO is now being attained in these three segments.

EPA recognizes that most of the hypoxic zone occurs outside of Louisiana's territorial waters. Additionally, EPA recognizes that the boundaries and breadth of the hypoxic zone are dynamic and the scale to which the hypoxic zone encroaches into Louisiana territorial waters is variable. Nevertheless, the state water quality standards apply throughout the entirety of the state coastal segments. If any applicable water quality standard is not attained in any portion of a segment, the segment must be identified as water quality limited.

EPA's detailed rationale for identifying segments 021102, 070601 and 120806 on the LA 2014 § 303(d) list is available at: http://www.epa.gov/Region6/water/npdes/tmdl/303d/la/rec-of-decision-la-2012-303d-list-2.pdf

Table 2. Segments added to the 2014 § 303(d) list by EPA due to exceedance of dissolved oxygen criteria.

Segment ID	LA Segment Number	Criteria Exceedance
Terrebonne Basin Coastal Bays and Gulf Waters to the State three-mile limit	120806	Oxygen, Dissolved
Mississippi River Basin Coastal Bays and Gulf Waters to the State three-mile limit	070601	Oxygen, Dissolved
Barataria Basin Coastal Bays and Gulf Waters to the State three-mile limit	021102	Oxygen, Dissolved

C.4 Identification of WQLS for Total Suspended Solids (TSS and Turbidity)

EPA determined the Louisiana list partially identified the Water Quality Limited Segments for TSS and Turbidity in need of TMDLs. However, EPA determined the state failed to identify and include on its list two (2) Water Quality Limited Segments in need of TMDLs for TSS and Turbidity. EPA is proposing to disapprove Louisiana's failure to list these segments, which are identified in Table 3.

The State did not identify two (2) segments on the LA 2014 § 303(d) list on the basis that support of TSS and Turbidity criteria could not be determined due to insufficient data. The state placed these segments into Category 3. Category 3 is reserved for waters where there is insufficient available data and/or information to make a use support determination. A rationale for placing the segments in Category 3 and not identifying the segments on the LA 2014 § 303(d) list was not provided in the 2014 Integrated Report.

EPA does not agree that there is insufficient data to identify the segments on Louisiana's 2014 § 303(d) list for excessive turbidity. It is EPA's understanding that segments 090205 and 090206 are fed by upstream segments that are meeting turbidity criteria. Additionally, it is understood that upstream segments have higher turbidity criteria than that of segments 090205 and 090206 and that such differences in criteria may necessitate an evaluation of the current turbidity criteria. However, until such re-evaluations and potential revisions are addressed via processes outlined in LAC 33:IX.1113.A.3, water quality data must be assessed against current water quality standards as found in LAC 33:IX.1113.B.9.b. Segments cannot be placed into Category 3 due to disagreement with currently established water quality standards as defined in LAC 33:IX.1113.B.9.b, or in anticipation of possible future criteria revisions.

Table 3. Segments added to the 2014 § 303(d) list by EPA due to exceedance of turbidity criteria.

Segment ID	LA Segment Number	Criteria Exceedance
Wilson Slough - all of that portion of the slough ((bayou) lying within the boundaries of St. Tammany Parish (Scenic)	090205	Turbidity
Bradley Slough - all of that portion of the slough (bayou) lying within the boundaries of St. Tammany Parish (Scenic)	090206	Turbidity

C.5 Review of the Methodology

EPA concluded the listing methodology employed in developing the State of Louisiana 2014 § 303(d) list describes a set of decision criteria that was partially reasonably applied. EPA has noted in previous sections instances in which the state's methodology was not consistently applied.

The methodology is not an item for approval under 40 CFR § 130.7 (d)(1). The methodology is an item specifically mentioned as documentation to support the List in 40 CFR § 130.7 (b)(6)(i). Although EPA reviewed the Louisiana listing methodology as part of our review of the listing submission, EPA's partial approval and proposed partial disapproval of the State of Louisiana

2014 § 303(d) list should not be construed as agreement with or approval of the listing methodology.

In general, waters were listed in cases where a certain percentage of samples exceeded the applicable water quality criteria as found in LAC 33:IX.11. The applicable percentages are provided in Louisiana's 2014 Louisiana Water Quality Inventory: Integrated Report (the LA 2014 Integrated Report).

C.6 Review of Nonpoint Sources

Louisiana properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with EPA guidance. § 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that §303(d) lists apply to waters impacted by point and/or nonpoint sources. This interpretation has been described in EPA guidance, and most recently in a 1997 memorandum clarifying certain requirements for 1998 § 303(d) lists.

C.7 Review of Waters within Indian Country

EPA's approval of the State of Louisiana 2014 § 303(d) list extends to all water bodies on the list with the exception of those waters that are within Indian Country, as defined in 18 U.S.C. §1151. EPA is taking no action to approve or disapprove the state's list with respect to those waters at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under § 303(d) for those waters.

C.8 Review of Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA determined Louisiana took reasonable steps to assemble all existing and readily available water quality-related data and information as required by 40 CFR § 130.7, including data and information from members of the public and government agencies via the public participation for the Louisiana 2014 Integrated Report by the state of Louisiana. Additional information on the requirements for Public Participation can be found in section B4 of this document.

EPA determined the state properly evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR § 130.7 (b)(5) after reviewing the Louisiana description of the data and information it considered. EPA's review was based on its analysis of whether the state reasonably considered all existing and readily available water quality related data and information.

C.9 Review of Priority Ranking and Two Year TMDL Development

EPA determined Louisiana properly assigned a priority ranking to listed waters for TMDL development and took into account the severity of pollution and the uses to be made of such waters.

Louisiana's 2014 § 303(d) list submittal, dated August 19, 2014, did not include WQLSs targeted for TMDL development in the next two years, as required per 40 CFR § 130.7 (b)(4). Following discussions between EPA and Louisiana, the state revised several priority rankings in order to identify nine (9) WQLSs targeted for TMDL development in the next two years. These revisions were submitted to EPA on September 19, 2014 and made available to the public via the LDEQ website on September 19, 2014. The revisions can be viewed at http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/WaterQualityStandardsAssessment.aspx.

Louisiana's rationale for assigning TMDL prioritization is described in the Louisiana 2014 Integrated Report. Generally, the states rationale for identifying TMDL priorities is as follows:

- Segments within the Lake Pontchartrain Basin identified for low dissolved oxygen potentially due to anthropogenic sources were given a high priority.
- Two segments with impairments due to excessive fecal coliform bacteria were given a high priority.
- Segments identified for excessive fecal coliform concentrations, exclusive of those noted above, were assigned medium priority.
- Segments identified for elevated levels of enterococci bacteria based upon LDHH beach monitoring data were assigned a low priority.
- Segments in IRC Categories 5 or 5RC identified for criteria exceedances of high/low pH, metals, minerals, temperature, turbidity or mercury in fish tissue were assigned a low priority. Category 5RC represents segments impaired based upon current criteria but where the state has determined that updated criteria are likely needed. The state has assigned a low priority for TMDL development to these segments to allow time for potential criteria revisions.

C.10 Review of Public Participation

EPA determined that Louisiana took reasonable steps to include the public and other stakeholders in the process of producing the State of Louisiana 2014 § 303(d) list.

Based on its review of the documents submitted by the state, EPA determined the notice provided by the state and the period of time provided for public comment were reasonable. Public notice, which was posted May 7, 2014 requested comments on the draft State of Louisiana 2014 § 303(d) list and on the rationale for development of the State of Louisiana 2014 § 303(d) list. The public notice provided a 30 day comment period. The public notice was published on the LDEQ website and in the following Louisiana newspapers: Advocate, Times Picayune, Times, News Star, Courier, Town Talk, Advertiser and American Press.

EPA determined the responses to comments and actions were reasonable based on the review of documents submitted. Louisiana prepared a response to comments document following conclusion of public comment period and assessment of submitted data. This response to comments was included in the Integrated Report submittal to EPA on August 19, 2014. The response to comments and proposed Integrated Report was also posted on the Louisiana website. (LDEQ. 2014).

D. Administrative Record Supporting this Action

This EPA decision to partially approve and propose to partially disapprove the State of Louisiana 2014 § 303(d) list was based on a careful review of the materials submitted by the state with the State of Louisiana 2014 § 303(d) list. The administrative record supporting EPA's decision comprises the materials submitted by the state, CWA § 303(d), associated Federal regulations, Louisiana assessment methodology, EPA guidance concerning preparation of section 303(d) lists, this decision document, supporting reports and the decision letter. EPA determined that the materials provided by the state with its submittal provided sufficient documentation to support our analysis and findings that the state listing decisions partially meet the requirements of the CWA and associated Federal regulations. We are aware that the state compiled and considered additional materials (e.g. raw data and water quality analysis reports) as part of its list development process that were not included in the materials submitted to EPA. EPA did not consider these additional materials as part of its review of the listing submission. It was unnecessary for EPA to review all of the materials considered by the state in order to determine that, based on the materials submitted to EPA by the state; the state partially complied with the applicable Federal listing requirements. Moreover, Federal regulations do not require the state to submit all data and information considered as part of the listing submission.

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