Responsiveness Summary Concerning EPA's Decisions to Add Waters to Louisiana's 2014 Clean Water Act Section 303(d) List

Administrative Records Cited

- 1. Federal Register, Tuesday, March 10, 2015 at Volume 80 Number 46, page 12628. http://www.gpo.gov/fdsys/pkg/FR-2015-03-10/pdf/2015-05444.pdf
- 2. The Advocate, published in Baton Rouge, Louisiana. March 04, 2015.
- 3. EPA Decision Document for Louisiana's 2008 § 303(d) list. http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists
- 4. EPA Decision Document for Louisiana's 2010 § 303(d) list. http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists
- 5. EPA Decision Document for Louisiana's 2012 § 303(d) list. http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists
- EPA Decision Document for Louisiana's 2014 § 303(d) list. http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists
- US EPA, 2002 Integrated Water Quality Monitoring and Assessment Report Guidance. November 19, 2001.

http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2001wqma.cfm

- US EPA, Guidance for 2006 Assessment, Listing and Report Requirements Pursuant to Section 303(d), 305(b) and 314 of the Clean Water Act. July 29, 2005. <u>http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2006irg-report.pdf</u>
- Comments received. Teagan Treadaway. Louisiana Department of Environmental Quality. Post Office Box 4313 • Baton Rouge, Louisiana 70821-4313
- 10. Comments received. Henry T. Graham, Jr. Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825
- 11. Comments received. Lisa W. Jordan, Deputy Director, Tulane Environmental Law Clinic, 6329 Freret Street, New Orleans, LA 70118
- 12. Exhibit 1, Citizens' 2014 Comments to LDEQ. Lisa W. Jordan, Deputy Director, Tulane Environmental Law Clinic, 6329 Freret Street, New Orleans, LA 70118
- 13. 2012 State of Louisiana Clean Water Act § 303(d)/§ 305(b) Integrated Report. <u>http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/WaterQualityStandardsA</u> <u>ssessment/WaterQualityInventorySection305b/2012IntegratedReport.aspx</u>
- 14. 2014 State of Louisiana Clean Water Act § 303(d)/§ 305(b) Integrated Report. http://www.deq.louisiana.gov/portal/DIVISIONS/WaterPermits/WaterQualityStandardsA ssessment/WaterQualityInventorySection305b/2012IntegratedReport.aspx
- 15. Louisiana Water Quality Management Plan. Volume 1: The Continuing Planning Process <u>http://www.deq.louisiana.gov/portal/Portals/0/planning/WQMP%20CPP%202004%20Vo</u> <u>1%201%20document.pdf</u>
- 16. Louisiana Administrative Code Title 33 Part IX. Subpart 1, Chapter 11. Louisiana Surface Water Quality Standards
- 17. EPA comments to LDEQ regarding proposed LA 2014 § 303(d) list. EPA, Region 6, 1445 Ross Avenue, Dallas, TX, 75202-2733
- Responsiveness Summary Concerning EPA's Decisions To Add Waters to Louisiana's 2012 Clean Water Act Section 303(d) List <u>http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists</u>

Public Participation Activity Conducted

On Tuesday, March 10, 2015, EPA Region 6 published a notice in the Federal Register at Volume 80 Number 46, page 12628 and The Advocate, published in Baton Rouge, Louisiana on March 04, 2015. See Administrative Record Nos. 1 and 2. These public notices requested comments from the public on EPA's proposed (1) disapproval of Louisiana's decisions not to list certain waterbody segments; and (2) decision to add these waterbody segments to Louisiana's 2014 Section § 303(d) list.

Summary of Actions

EPA received comments from the Louisiana Department of Environmental Quality, the Louisiana Chemical Association and the Tulane Law Clinic regarding its proposed action to add waterbody segments to the 2014 Louisiana § 303(d) list. See Administrative Record Nos. 9-11. This response to comments addresses only those comments regarding EPA's proposed action to add 43 specific waterbody segments to the 2014 Louisiana § 303(d) list.

EPA has reviewed the comments regarding the addition of waterbody segments and finds no new information presented or persuasive argument as to why these segments should not be added as part of the 2014 Louisiana § 303(d) list. Therefore, EPA is taking Final Action on the addition of 43 waterbody segments to the Louisiana 2014 § 303(d) list.

Summary of Public Comments

The following respondent provided three written comments during the public comment period.

Tegan Treadaway Assistant Secretary Office of Environmental Services Louisiana Department of Environmental Quality Baton Rouge, LA 70821-4313

The following respondent provided six written comments during the public comment period.

Henry T. Graham, Jr. Vice President of Environmental Affairs and General Counsel Louisiana Chemical Association One American Place, Suite 2040 Baton Rouge, LA 70825

The following respondent provided four written comments during the public comment period.

Lisa W. Jordan Deputy Director Tulane Environmental Law Clinic 6329 Freret Street, New Orleans, LA 70118 *Submitted on behalf of* the Gulf Restoration Network, the Louisiana Environmental Action Network, the Lower Mississippi Riverkeeper, and the Sierra Club, Delta Chapter (collectively "Citizens").

List of Abbreviations

CFR – Code of Federal Regulation CPP – Continuing Planning Process CWA – Clean Water Act GRN – Gulf Restoration Network LCA – Louisiana Chemical Association LDEQ – Louisiana Department of Environmental Quality LDWF – Louisiana Department of Wildlife and Fisheries LEAN – Louisiana Environmental Action Network

1. Identification of Water Quality Limited Segments (WQLS) for minerals for 88 waterbody impairment combinations (WICs) on 38 coastal subsegments.

Comment

Tegan Treadaway, Assistant Secretary, Office of Environmental Services, Louisiana Department of Environmental Quality, Baton Rouge, LA 70821-4313. See Administrative Record No. 9.

The U.S. Environmental Protection Agency's (USEPA's) decision to override Louisiana's classification of 88 WICs for chlorides, sulfates, and/or total dissolved solids (TDS) (collectively referred to as minerals) could result in the development of expensive, unnecessary, and likely unenforceable Total Maximum Daily Loads (TMDLs).

As detailed in Louisiana's 2014 Water Quality Integrated Report (IR), Louisiana found the 38 coastal subsegments affected by the 88 WICs identified in Table 1 to be tidally influenced. Therefore, LDEQ is re-evaluating its minerals criteria, assessment processes, and associated data sets. Based on the tidal influence and the broader, ongoing minerals criteria reevaluation, LDEQ placed these 88 WICs in Integrated Report Category (IRC) 3; insufficient data. USEPA acknowledged the tidal influence in its decision document, saying it would "create unique challenges in terms of application of minerals criteria." Rather than allow Louisiana to keep these WICs in IRC 3 pending further study, USEPA chose to assign them to IRC 5, on the § 303(d) list, thus forcing development of unnecessary TMDLs.

Table 1.

Subsegments assessed for chloride, sulfate, and TDS and assigned to IRC 3 due to the suspected source of natural sources.

				Total Dissolved
Subsegment	Subsegment Description	Chloride	Sulfates	Solids
LA030201_00	Calcasieu River-From Marsh Bayou to	<u> </u>		
_	saltwater barrier (Scenic)	X	Х	Х
LA030701_00	Bayou Serpent	T T		X
LA030702 00	English Bayou-From headwaters to			
	Calcasieu River			Х
LA030801_00	West Fork Calcasieu River-From		1	İ
_	confluence with Beckwith Creek and			
	Hickory Branch to mainstem of Calcasieu			
	River	Х	Х	Х
LA030803_00	Beckwith Creek-From headwaters to			
	West Fork Calcasieu River			Х
LA030806_00	Houston River-From Bear Head Creek at			
	LA-12 to West Fork Calcasieu River	Х	Х	Х
LA031101_00	Intracoastal Waterway-From Calcasieu			
	Lock to East Calcasieu River Basin			
	boundary	X	Х	X
LA040201_00	Bayou Manchac-From headwaters to			
	Amite River	X	Х	Х
LA040303_00	Amite River-From Amite River Diversion			
	Canal to Lake Maurepas	X		Х
LA040304_00	Grays Creek-From headwaters to Amite			
	River	Х	Х	Х
LA040402_00	Amite River Diversion Canal-From			
	Amite River to Blind River	X		
LA040502_00	Tickfaw River-From LA-42 to Lake			
	Maurepas	X	X	X
LA040505_00	Ponchatoula Creek and Ponchatoula River	ļ	<u> </u>	X
LA040603_00	Selsers Creek-From headwaters to South			
	Slough	_	<u> </u>	X
LA040604_00	South Slough; includes Anderson Canal			
	to I-55 borrow pit	X	<u> </u>	X
LA040702_00	Tangipahoa River-From I-12 to Lake			
	Pontchartrain	X	X	X
LA040803_00	Tchefuncte River-From LA-22 to Lake			
	Pontchartrain (Estuarine)	X	_	X
LA040901_00	Bayou Lacombe-From headwaters to US-			
	190 (Scenic)	X	X	X
LA040902_00	Bayou Lacombe-From US-190 to Lake			
	Pontchartrain (Scenic) (Estuarine)	X	X	X
LA040903_00	Bayou Cane-From headwaters to US-190			
	(Scenic)	X	X	Х

Subsegment	Subsegment Description	Chloride	Sulfates	Total Dissolved Solids
LA040905_00	Bayou Liberty-From headwaters to LA-			
	433	Х	X	Х
LA040907_00	Bayou Bonfouca-From headwaters to LA-			
	433	Х	X	Х
LA041101_00	Bonne Carre Spillway	Х	X	Х
LA050103_00	Bayou Mallet-From headwaters to Bayou			
	Des Cannes			Х
LA050402_00	Lake Arthur and Lower Mermentau River			
	to Grand Lake	Х	X	Х
LA050601_00	Lacassine Bayou-From headwaters to			
	Grand Lake	Х	X	Х
LA050602_00	Intracoastal Waterway-From Calcasieu			
	Basin Boundary to Mermentau River	Х	X	Х
LA050603_00	Bayou Chene-From headwaters to			
	Lacassine Bayou; includes Bayou Grand			
	Marais		X	
LA050702_00	Intracoastal Waterway-From Mermentau			
	River to Vermilion Locks	X	X	Х
LA050703_00	White Lake		X	
LA060802_00	Vermilion River-From LA-3073 bridge to			
	ICWW			Х
LA090102_00	East Pearl River-From Holmes Bayou to			
	I-10	Х	X	Х
LA090207_00	Middle Pearl River and West Middle			
	Pearl River-From West Pearl River to			
	Little Lake	X	X	Х
LA090207_5112	Morgan Bayou-From headwaters near I-			
	10 to Middle Pearl River	X	X	Х
LA120501_00	Bayou Grand Caillou-From Houma to			
	Bayou Pelton	X		Х
LA120505_00	Bayou Du Large-From Houma to			
	Marmande Canal	X		X
LA120603_00	Company Canal-From ICWW to Bayou			
	Terrebonne	X		X
LA120605_00	Bayou Pointe Au Chien-From headwaters			
	to St. Louis Canal	X	X	X

Review of U.S. Geological Survey (USGS) flow data for three of these subsegments found significant tidal influences on three major rivers along the Louisiana coast. These included Mermentau River at Mermentau, LA (Figure 1), Vermilion River at Perry, LA (Figure 2), and Amite River at Port Vincent (Figure 3). Mermentau, LA is approximately 42 miles inland; Perry, LA is approximately 14 miles inland; and Port Vincent is approximately 17 miles inland. Because of tidal influences at these inland USGS sites, tributary streams entering near these water bodies are also expected to be tidally influenced. This resulted in elevated minerals levels above concentrations expected when criteria were originally developed for the area.

Based on the preceding discussion, first detailed in the 2014 IR, LDEQ continues to assert there is insufficient data to assess the referenced coastal subsegments as not meeting the Fish and Wildlife Propagation (FWP) use for minerals, thereby placing the 88 WICs in IRC 3. USEPA is respectfully asked to reverse its decision based on the preceding discussion and not place these 88 WICs in IRC 5. If this is not possible, then LDEQ requests the priority for TMDL development be set as low as possible to permit time for possible criterion revisions.

At this time, Louisiana reminds USEPA that if the agency continues to disapprove Louisiana's § 303(d) list for these 88 WICs, thereby placing them in IRC 5, then the USEPA is responsible for completion of the required TMDLs. This assertion is based on 40 CFR \$130.7(d)(2), which states in part that the USEPA Regional Administrator "...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 water quality standards." (Emphasis added). Therefore, it is clear that if USEPA Region 6 proceeds with its decision, then Region 6 is responsible for TMDL development on these WICs, not Louisiana.



Figure 1. USGS flow data for Mermentau River at Mermentau, LA.



Figure 2. USGS flow data for Vermillion River at Perry, LA.







EPA Response

EPA does not agree that waters identified above should be listed in Integrated Reporting Category (IRC) 3 instead of IRC 5, on the 2014 Louisiana § 303(d) list. It is EPA's position that such waters should be listed in IRC 5 of the § 303(d) list at the present time. It remains EPA's position that natural background conditions should be addressed via a water quality standards revision approach, as opposed to the § 303(d) listing process. This position is consistent with the Louisiana water quality standards which clearly state that changes in natural conditions may require a revision of the numeric criteria at any time. See LAC 33 Part IX, Chapter II, §1109. If the water quality standards are amended by the state to reflect more appropriate criteria representative of natural conditions, and a re-assessment of data demonstrates that these waters are not impaired, EPA would consider the removal of these waters from the § 303(d) list to be appropriate.

Water quality limited segments are defined as any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of technology based effluent limitations (See 40 CFR § 130.2(j)). The term "applicable water quality standards" refers to those water quality standards established under § 303 of the Clean Water Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. See 40 CFR § 130.7(a)(3). Thus, EPA's decision to add the waterbodies identified in Table 1 to the list was based on the **currently applicable** water quality standards as required by federal regulation. Segments cannot be placed into IRC 3 due to non-compliance with currently established water quality standards as defined in LAC 33:IX.1113.C.2, or in anticipation of possible future criteria revisions.

Additionally, ambient surface water quality monitoring data for some segments identified in Table 1, above, do not support the commenter's assertion that tidal influences (in this case, a natural condition) elevated minerals levels above concentrations expected when the criteria were originally developed for the area. EPA evaluated water quality data for a subset of segments identified in Table 1 and concluded that available data show limited tidal influences for the segments examined. See Attachment 1. Data used in EPA's evaluations were obtained from LDEQ's publically accessible database housing ambient surface water quality monitoring data, located at: http://www.deq.louisiana.gov/portal/tabid/2739/Default.aspx. The data were specific to monitoring sites and segments described as experiencing tidal influence and identified in Figure 3.2.4 of the state's 2014 Integrated Report. See Administrative Record No. 14. Data were evaluated for tidal (i.e. saltwater) influences based on salinity data collected at each sampling date; since site-specific flow data were not available. Salinity values were graphed over time and compared to a salinity threshold of 2 parts per thousand (ppt), which is the average concentration delineating Fresh Water and Brackish Water as found in the Louisiana surface water quality standards. See Administrative Record No. 16. While concentrations below 2 ppt salinity do not preclude the occurrence of tidal effects or estuarine conditions, the value does serve as a relative measure of saltwater intrusion and thus was used in evaluating the data.

Furthermore, several segments identified in Table 1 were identified on the 2012 § 303(d) list as having suspected anthropogenic sources of impairment. See Administrative Record No. 13.

However, no suspected anthropogenic sources were identified for these segments in the 2014 Integrated Report and no evidence was presented to explain why these segments are no longer suspected to be influenced by anthropogenic sources of impairment. <u>See</u> Administrative Record No. 14. Given the preliminary observations noted in this and the preceding paragraph, a case-bycase segment-specific evaluation of currently available data is encouraged in order to rule out potential anthropogenic sources of impairment and determine the magnitude and duration of tidal influences, if present. Such an evaluation is encouraged prior to revising current water quality standards and prior to IRC classification on the 2016 Integrated Report.

At this time EPA has no plans to establish TMDLs for segments identified in Table 1 that EPA is adding to the 2014 Louisiana § 303(d) list. EPA's regulations require states to establish TMDLs for waters included on state § 303(d) lists. For those waters added to the § 303(d) list by EPA in a disapproval action, EPA's longstanding policy allows states the opportunity first to establish the TMDLs. EPA reviews the state's TMDLs and if EPA disapproves the TMDL, then EPA must establish the TMDL.

At this time EPA places no expectations on the state to immediately establish TMDLs for the 38 segments identified in Table 1. EPA is under no obligation per 40 CFR 130.7(b)(4) or the CWA to include a priority ranking or schedule for TMDL development to waters added to a States' § 303(d) list. EPA defers to the state of Louisiana to prioritize those waters on its § 303(d) list in accordance with its priority ranking system. See 40 CFR 130.7(b)(4). Additionally, for the 38 segments identified above, EPA supports the establishment of a low priority for TMDL development in order to allow time to collect necessary information and complete analyses.

2. Identification of WQLS for dissolved oxygen (ammonia, BOD, CBOD) for three offshore coastal subsegments.

Comment

Tegan Treadaway, Assistant Secretary, Office of Environmental Services, Louisiana Department of Environmental Quality, Baton Rouge, LA 70821-4313. See Administrative Record No. 9.

Despite LDEQ's objections, during the 2008, 2010, and 2012 IR cycles the USEPA listed the three coastal subsegments of LA0211 02 00 (Barataria Basin Coastal Bays and Gulf Waters to the State three-mile limit), LA070601_00 (Mississippi River Basin Coastal Bays and Gulf Waters to the State three-mile limit), and LA120806_00 (Terrebonne Basin Coastal Bays and Gulf Waters to the State three-mile limit) on Louisiana's § 303(d) list, IRC 5, for those reporting years. For those three reports the LDEQ had determined the core data set used by USEPA for its listing override was insufficient for an accurate assessment; lacking consistent spatial and temporal coverage within the subsegments being assessed. In addition, LDEQ argued that development of a TMDL on the scale required for these three subsegments, approximately 41% of the contiguous United States, could not be reasonably undertaken by Louisiana alone.

For the 2014 IR, LDEQ once again determined sufficient data was lacking to list the three

subsegments as not supporting the FWP use due to low dissolved oxygen (DO) levels. During preparation of the 2014 IR, no new data of sufficient temporal or spatial detail was identified to permit a new assessment of these subsegments. In addition, because much of the data previously considered for the 2008, 2010, and 2012 IRs was outside the four-year data period used for the 2014 IR, there was even less data to consider for the 2014 report. Details of LDEQ's position can be found in the 2012 Integrated Report at:

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

Again, Louisiana reminds USEPA that if the agency continues to disapprove Louisiana's § 303(d) list for these three subsegments, thereby placing them in IRC 5, then the USEPA is responsible for completion of the required TMDLs. This assertion is based on 40 CFR § 130.7(d)(2), which states in part that the USEPA Regional Administrator " ... 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 water quality standards." (Emphasis added). LDEQ respectfully requests that these three subsegments remain in IRC 3 for low DO until such time as a comprehensive dataset can be developed with which to make an accurate assessment.

EPA Response

EPA does not agree that its decision to add the three coastal waters (segments LA021102_00, LA070601_00, LA120806_00) to Louisiana's 2008, 2010 and 2012 § 303(d) lists for low dissolved oxygen was based on limited or insufficient data. EPA disagrees that these three coastal segments should be placed in IRC 3 of the integrated report. As described in EPA's 2008 and 2010 Louisiana § 303(d) list decision documents, approximately 231 dissolved oxygen measurements were collected at over 53 stations within state territorial waters. See Administrative Record Nos. 3 and 4. EPA concluded that the data were adequate to determine non-attainment of the marine dissolved oxygen criterion. Further, no new data or information were included in the state's 2014 Integrated Report to indicate that conditions have changed such that the state's marine criterion for dissolved oxygen is now being attained in these three segments. A comprehensive discussion of the state's and EPA's positions regarding the three coastal segments can be found in the EPA decision document for Louisiana's 2012 § 303(d) list available at: http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists. See

Additionally, the state's position that data are insufficient to identify coastal segments LA021102_00, LA070601_00 and LA120806_00 as not meeting the current dissolved oxygen marine criterion is inconsistent with the state's conclusions in the 2008 and 2010 Integrated Reports. Contrary to the comment above, for both the 2008 and 2010 listing cycles, the state and EPA agreed that available data were adequate to determine that coastal segments were not meeting the applicable marine dissolved oxygen criterion and thus impaired. See Administrative Record Nos. 3 and 4. While the state and EPA agreed on the impaired status of the three coastal segments, the state and EPA disagreed over the categorization of the impaired waters. For both the 2008 and 2010 listing cycles the state placed the coastal segments in IRC 4(b) which is defined in EPA's 2006 IR Guidance to include waters that are impaired but other control

measures obviate the need for a TMDL. EPA disapproved the state's placement of the segments in IRC 4(b) and instead added coastal segments 120806, 070601 and 021102 to IRC 5, the state's § 303(d) list. See Administrative Record Nos. 3 and 4.

At this time EPA has no plans to establish TMDLs for coastal segments LA021102_00, LA070601_00 and LA120806_00 that EPA is adding to the 2014 Louisiana § 303(d) list. EPA's regulations require states to establish TMDLs for waters included on state § 303(d) lists. For those waters added to the § 303(d) list by EPA in a disapproval action, EPA's longstanding policy allows states the opportunity first to establish the TMDLs. EPA reviews the state's TMDLs and if EPA disapproves the TMDL, then EPA must establish the TMDL . Establishing a TMDL does not hold the state of Louisiana responsible for reducing or offsetting loads from upstream states. The reality that multiple states are contributing loads to the Gulf of Mexico does not negate the need to include these waters in IRC 5 and the need for eventual establishment of a TMDL. During development or upon establishment of the TMDL, implementation options could be evaluated to best address upstream contributions.

3. Identification of WQLS for Total Suspended Solids (TSS and Turbidity) on Subsegments LA090205_00 and LA090206_00 in Pearl River Basin.

Comment

Tegan Treadaway, Assistant Secretary, Office of Environmental Services, Louisiana Department of Environmental Quality, Baton Rouge, LA 70821-4313. See Administrative Record No. 9.

The USEPA's decision to override Louisiana's classification of two WICs for turbidity on LA090205_00 and LA090206_00 will result in the development of expensive, unnecessary, and likely unenforceable TMDLs.

LDEQ respectfully requests that USEPA not override LDEQ's findings by including subsegments LA090205_00 (Wilson Slough) and LA090206_00 (Bradley Slough) on Louisiana's 2014 IR § 303(d) list. Both subsegments are designated as Outstanding Natural Resource Waters (ONRW) in LAC 33:IX.1123.C.Table 3. This designated use results in a criterion of 25 NTU (LAC 33:IX.1113.B.9.b.v.). Louisiana has found this criterion is inappropriate for the following reasons. (1) All water entering these two streams comes from the Pearl River (LA090107_00), which has a turbidity criterion of 50 NTU (LAC 33:IX.1113.B.9.b.iii). (2) Due to the braided nature of the Pearl River within its swamp basin, interior streams such as Wilson and Bradley Sloughs eventually return to the main channels of the Pearl River. (3) A man altered but originally natural distribution channel off the west bank of the Pearl River results in a large portion of that river's flow moving down Wilson Slough with a subsequent distribution point down Bradley Slough. This essentially makes Wilson Slough one of the main channels of the Pearl River at this point. (In an effort to reduce flow toward Wilson and Bradley Sloughs, sometime between 1998 and 2004 a rock weir was constructed at the point of distribution from the main channel of the Pearl River. This weir remains in place; however, at times of high flows it may be nearly overtopped.) (4) Wilson Slough becomes the West Pearl River (LA090201_00) approximately 4.5 miles downstream from its origin where it diverts from the Pearl River. Bradley Slough flows into the West Pearl River approximately 3.5 miles downstream from where it diverts from Wilson Slough. Despite being an ONRW, the turbidity criterion for West Pearl River is 50 NTU due to LAC 33:IX.III3.B.9.b.iii. Figure 4 illustrates this hydrologic path using aerial photography from the 2013 National Agriculture Imagery Program. It is not known what percentage of Pearl River flow is diverted toward Wilson and Bradley Sloughs, however, based on aerial photography, personal observation, and discussion with LDEQ regional staff the diverted flow can be significant at times.



Figure 4. Interconnections between Pearl River, Bradley Slough, Wilson Slough and West Pearl River.

To summarize the preceding hydrologic discussions, water entering Wilson and Bradley Sloughs has a turbidity criterion of 50 NTU. During the 4.5 mile reach of Wilson Slough the criterion is 25 NTU, with no anthropogenic or natural contributions to increase the turbidity. When Wilson Slough becomes the West Pearl River and Bradley Slough discharges to West Pearl River, the criterion immediately changes back to 50 NTU. It is evident from this discussion that while the turbidity criterion of Wilson and Bradley Sloughs may be 25 NTU due to the ONRW designated use, there is no possible way the two streams can meet this criterion when the incoming Pearl River water naturally exceeds this level; hence LDEQ's decision to report these two "impairments" as IRC 3.

Based on the preceding discussion, LDEQ respectfully requests USEPA allow LDEQ to maintain the turbidity "impairment" on LA090205_00 and LA090206_00 in IRC 3 rather than

disapproving LDEQ's decision and placing them in IRC 5. If this is not possible, then LDEQ requests the priority for TMDL development be set as low as possible to permit time for possible criterion revisions.

As with the two previous sections, LDEQ reminds USEPA that if the agency continues to disapprove Louisiana's § 303(d) list for these two WICs, thereby placing them in IRC 5, then it is the USEPA's responsibility to complete the required TMDLs.

EPA Response

EPA does not agree that waters identified above should be listed in Integrated Reporting Category (IRC) 3 instead of IRC 5, on the 2014 Louisiana § 303(d) list. It is EPA's position that such waters should be listed in IRC 5 of the § 303(d) list at the present time. It remains EPA's position that inappropriate criteria, including criteria that are inappropriate due to natural background conditions, should be addressed via a water quality standards revision approach, as opposed to the § 303(d) listing process. This position is consistent with the Louisiana water quality standards which clearly state that changes in natural conditions may require a revision of the numeric criteria at any time. See LAC 33 Part IX, Chapter II, §1109. If the water quality standards are amended by the state to reflect more appropriate criteria representative of natural conditions, and a re-assessment of data demonstrates that these waters are not impaired, EPA would consider the removal of these waters from the §303(d) list to be appropriate.

Water quality limited segments are defined as any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of technology based effluent limitations (See 40 CFR § 130.2(j)). The term "applicable water quality standards" refers to those water quality standards established under § 303 of the Clean Water Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. See 40 CFR § 130.7(a)(3). Thus, EPA's decision to add the waterbodies identified above to the list was based on the **currently applicable** water quality standards as required by federal regulation. Segments cannot be placed into IRC 3 due to non-compliance with currently established water quality standards as defined in LAC 33:IX.1113.C.2, or in anticipation of possible future criteria revisions.

At this time EPA has no plans to establish TMDLs for segments LA090205_00 and LA090206_00 that EPA is adding to the 2014 Louisiana § 303(d) list. EPA's regulations require states to establish TMDLs for waters included on state § 303(d) lists. For those waters added to the § 303(d) list by EPA in a disapproval action, EPA's longstanding policy allows states the opportunity first to establish the TMDLs. EPA reviews the state's TMDLs and if EPA disapproves the TMDL, then EPA must establish the TMDL.

At this time EPA places no expectations on the state to immediately establish TMDLs for segments LA090205_00 and LA090206_0. EPA is under no obligation per 40 CFR 130.7(b)(4) or the CWA to include a priority ranking or schedule for TMDL development to waters added to a States' § 303(d) list. EPA defers to the state of Louisiana to prioritize those waters on its § 303(d) list in accordance with its priority ranking system. See 40 CFR 130.7(b)(4).

Additionally, for the two segments identified above, EPA supports the establishment of a low priority for TMDL development in order to allow time to collect necessary information and complete analyses.

4. General – Incorporation of Other Comments.

Comment

Henry T. Graham, Jr., Vice President of Environmental Affairs and General Counsel, Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825. <u>See</u> Administrative Record No. 10.

LCA hereby adopts and incorporates by reference those comments on the Proposed Section 303(d) List Partial Disapproval/Additions made by (a) members of LCA, (b) the Louisiana MidContinent Oil and Gas Association (LMOGA), (c) members of LMOGA, (d) members of the American Chemistry Council, and (e) the Louisiana Department of Environmental Quality (LDEQ) to the extent such comments are not inconsistent with the comments made herein by LCA.

EPA Response

EPA acknowledges the comment identified above. Referenced comments are responded to elsewhere in this document.

5. General – Support for LDEQ Decision.

Comment

Henry T. Graham, Jr., Vice President of Environmental Affairs and General Counsel, Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825. <u>See</u> Administrative Record No. 10.

For the reasons set forth by LDEQ in the 2014 Louisiana Water Quality Inventory: Integrated Report Fulfilling Requirements of the Federal Clean Water Act, Sections 305(b) and 303(d) submitted to EPA (Louisiana Integrated Report), LCA supports LDEQ's decision to not list the subject 43 water quality limited segments and associated pollutants constituting 93 waterbody-pollutant combinations.

EPA Response

EPA acknowledges the comment identified above. Referenced comments are responded to elsewhere in this document.

6. General – Opposition to EPA Proposal to Add Waterbody-Pollutant Combinations to the Louisiana 2014 Section 303(d) list.

Comment

Henry T. Graham, Jr., Vice President of Environmental Affairs and General Counsel, Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825. <u>See</u> Administrative Record No. 10.

As noted above, LCA believes that LDEQ's decision to not list the subject 43 water quality limited segments and associated pollutants constituting 93 waterbody-pollutant combinations was correct. LCA thus opposes EPA's proposal to add these waterbody-pollutant combinations to the Louisiana 2014 Section 303(d) list.

EPA Response

EPA acknowledges the comment identified above. Referenced comments are responded to elsewhere in this document.

7. 38 Segments – Minerals Criteria.

Comment

Henry T. Graham, Jr., Vice President of Environmental Affairs and General Counsel, Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825. <u>See</u> Administrative Record No. 10.

As noted by EPA in the Record of Decision for EPA Action on Louisiana's Clean Water Act 2014 §303(d) List (ROD),¹ LDEQ decided not to include the following water quality limited segments on the state 303(d) list, while EPA proposes to include them on the list because of the noted criteria exceedance(s):

Segment ID	LA Segment	Criteria Exceedance
	Number	
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	LA030702_00	Total Dissolved Solids
River		
West Fork Calcasieu River-From confluence	LA030801_00	Chlorides, Sulfates, Total Dissolved Solids
with Beckwith Creek and Hickory Branch to		
Beckwith Creek-From headwaters to West Fork	LA030803_00	Total Dissolved Solids
Calcasieu River		

Segment ID	LA Segment Number	Criteria Exceedance
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
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

Segment ID	LA Segment	Criteria Exceedance
	Number	
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

LDEQ decided not to include these water quality segments on the Louisiana 303(d) list because LDEQ had insufficient data to determine attainment of uses and standards for such water quality segments and suspected that naturally occurring conditions may be the source of the impairment(s).² EPA does not agree that there is insufficient data available to include these water quality segments on the Louisiana 303(d) list.³

The purpose of a state's 303(d) list is to identify those waters within the state's boundaries for which technology-based effluent limits are not stringent enough to implement any water quality standard applicable to such waters.⁴ Total maximum daily loads (TMDLs) are to be developed for water body segments included on a state's 303(d) list.⁵ TMDLs are calculations that determine the maximum amount of pollutant allowed to be released into a water body without impairing its designated uses (fishable, swimmable, habitat, etc.) and allocate the maximum amount among the various point sources (referred to as the waste load allocation) and non-point sources (referred to as the load allocation) in the watershed, with a sufficient margin of safety. All that said, a water quality segment should not be included on the 303(d) list if its causes for impairment are naturally occurring,⁶ nor should any TMDL be imposed to improve naturally occurring water quality conditions.

Given the data available to LDEQ, LDEQ's stated intent to further evaluate these water quality segments to determine if 303(d) listing is appropriate, and the limited resources available to the state and federal governments to develop TMDLs, LCA submits that LDEQ's decision not to include the above water quality segments on the 303(d) list at this time was entirely appropriate.

 ¹ ROD, pp. 9-12.
 ² See, Louisiana Integrated Report, pp. 68 -73.
 ³ ROD, pp. 9-12.
 ⁴ See, 42 U.S.C. 1313(d)(1)(A).
 ⁵ See, 42 U.S.C. 1313(d)(1)(C).
 ⁶ See, 40 CEP 121 10(c).

EPA Response

EPA does not agree that waters identified above should be listed in Integrated Reporting Category (IRC) 3 instead of IRC 5, on the 2014 Louisiana § 303(d) list. It is EPA's position that such waters should be listed in IRC 5 of the § 303(d) list at the present time. It remains EPA's position that natural background conditions should be addressed via a water quality standards revision approach, as opposed to the § 303(d) listing process. This position is consistent with the Louisiana water quality standards which clearly state that changes in natural conditions may require a revision of the numeric criteria at any time. See LAC 33 Part IX, Chapter II, §1109. If the water quality standards are amended by the state to reflect more appropriate criteria representative of natural conditions, and a re-assessment of data demonstrates that these waters are not impaired, EPA would consider the removal of these waters from the §303(d) list to be appropriate.

Water quality limited segments are defined as any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of technology based effluent limitations (See 40 CFR § 130.2(j)). The term "applicable water quality standards" refers to those water quality standards established under § 303 of the Clean Water Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. See 40 CFR § 130.7(a)(3). Thus, EPA's decision to add the waterbodies identified above to the list was based on the **currently applicable** water quality standards as required by federal regulation. Segments cannot be placed into IRC 3 due to non-compliance with currently established water quality standards as defined in LAC 33:IX.1113.C.2, or in anticipation of possible future criteria revisions.

Additionally, ambient surface water quality monitoring data for some segments identified in Table 1, above, do not support the commenter's assertion that tidal influences (in this case, a natural condition) elevated minerals levels above concentrations expected when the criteria were originally developed for the area. EPA evaluated water quality data for a subset of segments identified in Table 1 and concluded that available data show limited tidal influences for the segments examined. See Attachment 1. Data used in EPA's evaluations were obtained from LDEQ's publically accessible database housing ambient surface water quality monitoring data, located at: http://www.deq.louisiana.gov/portal/tabid/2739/Default.aspx. The data were specific to monitoring sites and segments described as experiencing tidal influence and identified in Figure 3.2.4 of the state's 2014 Integrated Report. See Administrative Record No. 14. Data were evaluated for tidal (i.e. saltwater) influences based on salinity data collected at each sampling date; since site-specific flow data were not available. Salinity values were graphed over time and compared to a salinity threshold of 2 parts per thousand (ppt), which is the average concentration delineating Fresh Water and Brackish Water as found in the Louisiana surface water quality standards. See Administrative Record No. 16. While concentrations below 2 ppt salinity do not preclude the occurrence of tidal effects or estuarine conditions, the value does serve as a relative measure of saltwater intrusion and thus was used in evaluating the data.

Furthermore, several segments identified in Table 1 were identified on the 2012 § 303(d) list as having suspected anthropogenic sources of impairment. See Administrative Record No. 13. However, no suspected anthropogenic sources were identified for these segments in the 2014 Integrated Report and no evidence was presented to explain why these segments are no longer suspected to be influenced by anthropogenic sources of impairment. See Administrative Record No. 14. Given the preliminary observations noted in this and the preceding paragraph, a case-by-case segment-specific evaluation of currently available data is encouraged in order to rule out potential anthropogenic sources of impairment and determine the magnitude and duration of tidal influences, if present. Such an evaluation is encouraged prior to revising current water quality standards and prior to IRC classification on the 2016 Integrated Report.

Lastly, state and/or federal government resources available to develop a TMDL, limited or otherwise, do not abrogate the state's or EPA's responsibility to identify on a state's § 303(d) list those waters failing to meet applicable water quality standards.

8. 3 Segments -- Dissolved Oxygen (ammonia, BOD, and CBOD).

Comment

Henry T. Graham, Jr., Vice President of Environmental Affairs and General Counsel, Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825. <u>See</u> Administrative Record No. 10.

As noted by EPA in the ROD,⁷ LDEQ decided not to include the following water quality limited segments on the state 303(d) list, while EPA proposes to include them on the list because of the noted criteria exceedance(s):

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 021102 Gulf Waters to the State three-mile	021102	Oxygen, Dissolved

LDEQ decided not to include these water quality segments on the Louisiana 303(d) list because LDEQ had insufficient data to determine attainment of uses and standards for such water quality segments; and LDEQ determined that the core data set used by EPA for previously listing such subsegments was insufficient.⁸

Additional reasons LDEQ did not list the coastal subsegments included: (1) USEPA and LDEQ agree that stratified DO [dissolved oxygen] criteria should be investigated for Louisiana coastal waters; (2) the area of the subsegments encroached upon by the Gulf of Mexico hypoxic zone is minimal; (3) NOAA reports indicate excellent coastal fisheries in Louisiana; (4) USGS studies indicate the three Louisiana coastal subsegments have negligible impact on the Gulf of Mexico hypoxic zone; (5) TMDL development for those coastal subsegments will not resolve the Gulf hypoxia issue; and (6) addressing Gulf hypoxia will, at a minimum, require a multi-state and regional effort.

For the 2014 IR, LDEQ determined sufficient data is lacking to list the three coastal subsegments of LA0211 02 _ 00 (Barataria Basin Coastal Bays and Gulf Waters to the State three-mile limit), LA070601_00 (Mississippi River Basin Coastal Bays and Gulf Waters to the State three-mile limit), and LA120806_00 (Terrebonne Basin Coastal Bays and Gulf Waters to the State three-mile limit) as not supporting the FWP [fish and wildlife propagation] use due to low DO levels. During preparation of the 2014 IR, no new data of sufficient temporal or spatial detail was found to permit a new assessment of these sub segments or other Gulf Coastal subsegments to the State three-mile limit....⁹

EPA does not agree that there is insufficient data available to include these water quality segments on the Louisiana 303(d) list.¹⁰

See, LCA's Comment No.4 above (*for the purposes of this document, the comment has been re-labeled by EPA as comment 7, above*). Given the data available to LDEQ, the additional reasons for not listing set forth above, and the limited resources available to the state and federal governments to develop TMDLs, LCA submits that LDEQ's decision not to include the above water quality segments on the 303(d) list at this time was entirely appropriate.

⁷ ROD, pp. 12-13.
⁸ Louisiana Integrated Report; pp. 74-75.
⁹ *Id.*¹⁰ ROD, pp. 12-13.

EPA Response

EPA does not agree that its decision to add the three coastal waters (segments LA021102_00, LA070601_00, LA120806_00) to Louisiana's 2008, 2010 and 2012 § 303(d) lists for low dissolved oxygen was based on limited or insufficient data. As described in EPA's 2008 and 2010 Louisiana § 303(d) lists decision documents, approximately 231 dissolved oxygen measurements were collected at over 53 stations within state territorial waters. See Administrative Record Nos. 3 and 4. EPA concluded that the data were adequate to determine non-attainment of the marine dissolved oxygen criterion. Further, no new data or information were included in the state's 2014 Integrated Report to indicate that conditions have changed such that the state's marine criterion for dissolved oxygen is now being attained in these three segments. A comprehensive discussion of the state's and EPA's positions regarding the three coastal segments, including EPA's responses to the state's 6 additional reasons for not listing - identified in the comment above - can be found in the EPA decision document for Louisiana's 2012 § 303(d) list available at:

http://www.epa.gov/region6/water/npdes/tmdl/index.htm#303dlists. See Administrative Record No. 5.

Additionally, the states position that data are insufficient to identify coastal segments LA021102_00, LA070601_00 and LA120806_00 as not meeting the current dissolved oxygen marine criterion is inconsistent with the state's conclusions in the 2008 and 2010 Integrated Reports. Contrary to the comment above, for both the 2008 and 2010 listing cycles, the state and EPA agreed that available data were adequate to determine that coastal segments were not meeting the applicable marine dissolved oxygen criterion and thus impaired. See Administrative Record Nos. 3 and 4. While the state and EPA agreed on the impaired status of the three coastal segments, the state and EPA disagreed over the categorization of the impaired waters. The state placed the coastal segments in IRC 4(b) which is defined in EPA's 2006 IR Guidance to include waters that are impaired but other control measures obviate the need for a TMDL. EPA disapproved the state's placement of the segments in IRC 4(b) and instead added coastal segments 120806, 070601 and 021102 to IRC 5, the state's § 303(d) list. See Administrative Records 3 and 4.

Lastly, state and/or federal government resources available to develop a TMDL, limited or otherwise, do not abrogate the state's or EPA's responsibility to identify on a state's § 303(d) list those waters failing to meet applicable water quality standards.

9. 2 Segments -- Total Suspended Solids and Turbidity.

Comment

Henry T. Graham, Jr., Vice President of Environmental Affairs and General Counsel, Louisiana Chemical Association, One American Place, Suite 2040, Baton Rouge, LA 70825. <u>See</u> Administrative Record No. 10.

As noted by EPA in the ROD,¹¹ LDEQ decided not to include the following water quality limited segments on the state 303(d) list, while EPA proposes to include them on the list because of the noted criteria exceedance(s):

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

LDEQ decided not to include these water quality segments on the Louisiana 303(d) list because LDEQ had insufficient data to determine attainment of uses and standards for such water quality segments.

EPA does not agree that there is insufficient data available to include these water quality segments on the Louisiana 303(d) list.¹²

See, LCA's Comment No.4 above (*for purposes of this document, please see comment No. 7 above*). Given the data available to LDEQ and the limited resources available to the state and federal governments to develop TMDLs, LCA submits that LDEQ's decision not to include the above water quality segments on the 303(d) list at this time was entirely appropriate.

¹¹ ROD, pp. 13-14. ¹² *Id*.

EPA Response

EPA does not agree that waters identified above should be listed in Integrated Reporting Category (IRC) 3 instead of IRC 5, on the 2014 Louisiana § 303(d) list. It is EPA's position that such waters should be listed in IRC 5 of the § 303(d) list at the present time. It remains EPA's position that natural background conditions should be addressed via a water quality standards revision approach, as opposed to the § 303(d) listing process. This position is consistent with the Louisiana water quality standards which clearly state that changes in natural conditions may require a revision of the numeric criteria at any time. See LAC 33 Part IX, Chapter II, §1109. If the water quality standards are amended by the state to reflect more appropriate criteria representative of natural conditions, and a re-assessment of data demonstrates that these waters are not impaired, EPA would consider the removal of these waters from the §303(d) list to be appropriate.

Water quality limited segments are defined as any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of technology based effluent limitations (See 40 CFR § 130.2(j)). The term "applicable water quality standards" refers to those water quality standards established under § 303 of the Clean Water Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. See 40 CFR § 130.7(a)(3). Thus, EPA's decision to add the waterbodies identified above to the list was based on the **currently applicable** water quality standards as required by federal regulation. Segments cannot be placed into IRC 3 due to non-compliance with currently established water quality standards as defined in LAC 33:IX.1113.C.2, or in anticipation of possible future criteria revisions.

Lastly, state and/or federal government resources available to develop a TMDL, limited or otherwise, do not abrogate the state's or EPA's responsibility to identify on a state's § 303(d) list those waters failing to meet applicable water quality standards.

10. Citizens Support EPA's Decision to List Subsegments 120806, 070601 and 021102 of Louisiana's Coastal Waters as Impaired for Dissolved Oxygen.

Comment

Lisa W. Jordan, Deputy Director, Tulane Environmental Law Clinic, 6329 Freret Street, New Orleans, LA 70118. Counsel for Citizens. <u>See</u> Administrative Record No. 11.

Louisiana's 2014 303(d) list submission marks the fourth time that Louisiana refused to recognize the obvious – the Dead Zone is impaired for Dissolved Oxygen (DO).¹ Subsegments 120806, 070601, and 021102 – the nearshore waters of the Gulf in Louisiana waters – are within the Dead Zone and consistently show low DO levels, despite LDEQ's statement that the Dead Zone occurs "largely outside of state territorial waters." Appendix F: "Public Comments on the 2014 Integrated Report and Louisiana Department of Environmental Quality's Response to Comments," 2014 Louisiana Water Quality Integrated Report (305(b)/303(d)) REVISED DRAFT (hereinafter "LDEQ Response to Comments" or "RTC"), at p. F-1. Available data from numerous sources, including scientists such as Dr. Nancy Rabalais, Executive Director of the Louisiana Universities Marine Consortium (LUMCON), as well as Louisiana state agencies such as the Department of Wildlife and Fisheries, consistently document DO levels in these waters below the Louisiana DO criterion of 5 mg/L (La. Admin. Code tit. 33, pt. IX, §1113.C.3.c).²

This readily-available data, and EPA-supplied data in the administrative record, clearly shows that DO in all three subsegments consistently fell below the numeric criterion during the summer months. EPA's data includes LUMCON Data, EPA GED Data, and SEAMAP long- term trawl data. Each of these data sets show low levels of DO, which is consistent with long- term measurements of the hypoxic zone in the Gulf of Mexico.

Yet, for the second cycle in a row, LDEQ delisted the nearshore waters of the Gulf as impaired for Dissolved Oxygen. LDEQ's Rationale contained no support for the delisting; thus, it failed to meet the legal standard for delisting. LDEQ's failure to provide sufficient documentation and explanation for delisting subsegments 120806, 070601, and 021102 results in its failure to meet the regulatory criteria for delisting. EPA regulations require that "[e]ach State shall provide documentation to the Regional Administrator to support the State's determination to list or not to list its waters as required by §§ 130.7(b)(1) and 130.7(b)(2). This documentation must include a description of the methodology used to develop the list and a description of the data and information used to identify the waters." 40 C.F.R. §130.7(b)(6)(i) and (ii). Additionally, where EPA requests it, states must "demonstrate good cause for not including a water or waters on the list." *Id.* at §130.7(b)(6)(iv). LDEQ has demonstrated neither good cause nor documentation to support its finding.

Rather than provide documentation supporting its delisting, in its Response to Comments, LDEQ stated that "the data did not conclusively demonstrate that the subsegments were impaired during the time period covered by the 2014 IR assessments (October 2009 – September 2013)." LDEQ Response to Comments at p. F1. The data to which LDEQ refers, which it claims "was identified by the LDEQ during development of the 2014 IR," was not included or even mentioned in LDEQ's Rationale.³ Even more curiously, LDEQ still has not made available the

allegedly inconclusive "data" to which it refers. It appears, however, from the tone of LDEQ's discussion, that this undisclosed data may actually support a listing. At a minimum, compared to its 2012 effort when LDEQ heavily relied on 2007 data which it claimed showed the DO criterion was fully supported, LDEQ offers no data which it claims demonstrates support of the DO criterion. <u>See</u> January 17, 2012, Louisiana's 2012 Integrated Report and 303(d) List Methods and Rationale at p. 17.

LDEQ's additional explanations for delisting these subsegments – including the Hypoxia Taskforce's "strong commitment to address pollution that contributes to Gulf of Mexico hypoxia," the "98% [] input of nutrients from sources far upstream of Louisiana," and the alleged incapacity of a TMDL to "provide resolution" – also fail. LDEQ RTC at p. F2. None of LDEQ's explanations constitute good cause, and none constitute documentation supporting a delisting. All are merely excuses for ignoring the data, including yearly data from the summers of 2009 – 2013, as well as LDEQ's own prior findings that these segments are impaired for Dissolved Oxygen.

EPA's disapproval, and proposed decision to once again place these subsegments on the impaired waters list, is correct.

¹ Citizens' June 11, 2014, comments to LDEQ on its 2014 list, attached as Exhibit 1, provide a detailed summary of Louisiana's past attempts to exclude these waters from the impaired waters list.

² Additionally, both Texas A&M University, and the National Marine Fisheries Service as part of its SEAMAP cruises, measure and document the Dead Zone.

³ LDEQ admits this data was "not specifically outlined in the Rationale" LDEQ RTC at p. F1. However, not only is this data "not specifically outlined" in the Rationale, but, in fact, in its Rationale LDEQ unequivocally stated that it had no new data: "During preparation of the 2014 IR, no new data of sufficient temporal or spatial detail was found to permit a new assessment of these subsegments or other Gulf Coastal subsegments to the State three-mile limit." Rationale at 30.

EPA Response

EPA acknowledges the above comment and concurs with the commenter's conclusion that these three segments should be added to the Louisiana 2014 § 303(d) list.

11. EPA Should Clarify That the Priority Ranking for the Dissolved Oxygen TMDLs on the Nearshore Waters of the Gulf of Mexico Remains as Designated by EPA in its 2011 Listing.

Comment

Lisa W. Jordan, Deputy Director, Tulane Environmental Law Clinic, 6329 Freret Street, New Orleans, LA 70118. Counsel for Citizens. <u>See</u> Administrative Record No. 11.

When it placed the three nearshore Gulf subsegments on the 303(d) list in 2011, EPA assigned the required TMDLs a priority ranking of 8-13 years. Notice of Availability, 76 Fed. Reg. 62,061 (Oct. 6, 2011). This means that LDEQ had 8-13 years to complete a TMDL on these subsegments. In responding to GRN and LEAN's comments on its 2013 proposal to list the nearshore waters of the Gulf for Dissolved Oxygen on Louisiana's 2012 303(d) list, EPA clarified that its assigned priority ranking for these three TMDLs was not later than 8-13 years "from the time the waters were first identified in Category 5." Responsiveness Summary Concerning EPA's Decisions To Add Waters to Louisiana's 2012 Clean Water Act Section 303(d) List, availability published in 78 Fed. Reg. 45,925 (July 30, 2013), at p. 7. As stated above, these subsegments were first placed on the 303(d) list in 2011. Therefore, under EPA's priority ranking, TMDLs for these three subsegments must be finalized by 2019-2024. EPA has not mentioned the priority ranking in its current proposed listing decision. In its final decision, EPA should assign the TMDLs for these subsegments a higher priority ranking, based on the importance of the waters as articulated by GRN and LEAN in their comments on EPA's 2011 listing decision. No doubt LDEO will continue to stall and delay, practically ensuring that LDEO will take no action until late in this cycle, if at all. Nearly ten years is far too long to wait for TMDLs on these subsegments, particularly if LDEQ takes no action on a TMDL by the deadline. However, at a minimum, EPA should specify that the TMDLs maintain the same priority ranking EPA assigned them in 2011, and should repeat its direction to LDEQ that this 8-13 year period runs from when these waters were first listed in 2011. Otherwise, LDEQ may delist these waters every two years if it deems this to be an effective method of continually re-set the clock on the due date for the TMDLs.

EPA Response

The commenter is correct in the calculation of the timetable for TMDL development for coastal segments 120806, 070601, and 021102 as this timetable is consistent with EPA's language in decision documents for Louisiana's 2008, 2010 and 2012 § 303(d) lists and its Responsiveness Summary Concerning EPA's Decisions To Add Waters to Louisiana's 2012 Clean Water Act Section 303(d) List. See Administrative Records Nos. 3, 4, 5 and 18. EPA first identified coastal segments 120806, 070601, and 021102 on Louisiana's 2008 § 303(d) list and established an 8-13 year priority ranking for TMDL development. See Administrative Record No. 3. The 2008 Louisiana § 303(d) list was finalized by EPA in 2011. Therefore, 2011 represents the beginning of the 8-13 year priority ranking for TMDL development. Additionally, the state's omission of the coastal waters from the 2010, 2012 and 2014 § 303(d) list submittals does not alter or "reset" the 8-13 year priority ranking for TMDL development established in 2011 because, in each case, EPA disapproved the omissions (i.e. delistings) and added the three coastal waters to the respective lists.

No change has been made to the previously established priority ranking as a result of comments received. EPA neither approves nor disapproves the States' priority ranking submittal and is under no obligation per 40 CFR 130.7(b)(4) or the CWA to include a priority ranking or schedule for TMDL development to waters added to a States' § 303(d) list. However, in order to communicate EPA's commitment to addressing Hypoxia in the Gulf of Mexico, EPA proposed an assigned priority ranking and associated schedule for TMDL development to the proposed three added segments.

In making the determination to assign a priority ranking and schedule to the three coastal segments, EPA considered both the designated uses and the severity of pollution as required by the CWA and federal regulations. See CWA § 303(d)(1)(A) and 40 CFR 130.7(b)(4). EPA does not dispute the dissolved oxygen problem in these three coastal segments is severe. As EPA noted in its 2008, 2010 and 2012 § 303(d) decision documents, the segments show a high proportion (70%) of minimum dissolved oxygen values well below the dissolved oxygen criteria and often times below hypoxic levels. Dissolved oxygen criteria are assigned to protect the segments Fish and Wildlife Propagation Use, and existing data show the applicable criterion is not currently being met. Further, EPA understands the importance of these waters to Louisiana's fishing industry and to the State's economy as a whole. EPA is fully committed to addressing the water quality issues present in these three coastal segments, as well as the overall problem of hypoxia in the Northern Gulf of Mexico as quickly as possible. However, this issue will require a complex analysis before a TMDL can be developed, and the State will need sufficient time to collect the data and information necessary to complete such an analysis.

Therefore, in consideration of the scope and severity of the problem and the resulting need to allow sufficient time to complete a scientifically sound TMDL, EPA assigned each of the three added coastal segments a priority ranking of not later than 8 to13 years from the time the waters were first identified in Category 5, which is consistent with *EPA's 2006 Integrated Reporting Guidance* for establishing timelines for TMDL development in water quality limited segments. As noted in EPA's 2006 guidance, "a severe water quality problem may require complex analysis before developing a TMDL, and the state may therefore choose to give it a lower priority to allow time to collect necessary information and complete the analysis. Thus, the most severe water quality problems or the most toxic pollutants need not always be given the highest priority for TMDL development, if circumstances warrant a lower priority. See Administrative Record No. 8. EPA continues to encourage the State of Louisiana to collect information and data, as well as any other relevant precursors to TMDL development that may be related to interpretation or refinement of relevant water quality standards without delay and to complete the TMDL as expeditiously as possible.

12. EPA Should Develop the TMDLs for Subsegments 120806, 070601 and 021102 of Louisiana's Coastal Waters.

Comment

Lisa W. Jordan, Deputy Director, Tulane Environmental Law Clinic, 6329 Freret Street, New Orleans, LA 70118. Counsel for Citizens. <u>See</u> Administrative Record No. 11.

Notwithstanding the above discussion, EPA should promulgate TMDLs for Subsegments 120806, 070601 and 021102 in accordance with the statutory language of Clean Water Act section 303(d)(2). The EPA must "identify such waters in such State *and* establish such loads" upon disapproval of a 303(d) submission. In addition to identifying WQLSs that should have been submitted, the Administrator has a dual duty to also "establish such loads." The word such" in this statute is continually referring to the same "waters," thereby linking the duty to

"establish such loads" to the specific waters that the Administrator identified upon disapproval. In addition to being statutorily-mandated, the need for EPA to complete these TMDLs is even more stark in light of LDEQ's intransigence regarding the listing of the nearshore waters of the Gulf and almost-certain future foot-dragging in completing the TMDLs itself, as EPA envisions.

EPA Response

The commenter appears to urge EPA to establish TMDLs for the three coastal segments "upon disapproval" of the state's failure to include those segments on its most recent list. The commenter says § 303(d)(2) requires EPA to do so. EPA does not agree with the commenter's interpretation of § 303(d)(2). EPA interprets § 303(d)(2) to contain two separate requirements: (1) to identify impaired waters after it disapproves a state's inadequate identification and (2) to establish TMDLs after it disapproves inadequate state TMDLs. EPA does not interpret § 303(d)(2) to mean that EPA's decision to disapprove and cure a state's inadequate identification of waters also and immediately triggers an EPA duty to establish within 30 days TMDLs for those newly-identified waters. Instead, EPA interprets § 303(d) to require that TMDLs for the newly-identified waters be established, in the first instance, by the state in accordance with the state's priority ranking. The commenter's interpretation is inconsistent with the section's (and Congress's) clear preference that states be given the initial opportunity to establish TMDLs for identified waters. Although the statute uses the phrase "identification and load," EPA's regulations and longstanding state and EPA practice, reflected in numerous judicial decisions, treat the requirements to establish § 303(d) lists and TMDLs as distinct duties that operate on independent timelines. EPA discussed the appropriate priority ranking for the three coastal waters in response to the preceding Comment 11. EPA considers this to be a reasonable schedule for TMDL development by the state for those waters. As stated above, EPA continues to encourage the State of Louisiana to collect information and data, as well as any other relevant precursors to TMDL development that may be related to interpretation or refinement of relevant water quality standards without delay and to complete the TMDL as expeditiously as possible.

13. EPA's Proposed Listing of Waters for Minerals and Turbidity is Necessary.

Comment

Lisa W. Jordan, Deputy Director, Tulane Environmental Law Clinic, 6329 Freret Street, New Orleans, LA 70118. Counsel for Citizens. <u>See</u> Administrative Record No. 11.

EPA proposes to disapprove LDEQ's removal of 43 segments and 93 segment-pollutant pairs from Louisiana's 303(d) list as impaired for minerals and turbidity and to add these waters back to the list. Many of these proposed additions were cited by Citizens in their June 11, 2014, comments to LDEQ on its draft Integrated Report as improper delistings. Citizens' 2014 Comments to LDEQ at pp. 8-9. GRN prepared a spreadsheet of these improper mineral delistings, which Citizens attached to their 2014 Comments to LDEQ as Exhibit 7.

In the case of the majority of the proposed additions to the list – for mineral impairment – LDEQ's delisting excuse that "[b]ecause these subsegments were not recognized as estuarine

during criteria development, they may have been assigned excessively low criteria" does not suffice under the law, nor is it reasonable. See LDEQ Rationale at p. 23. LDEQ cannot first delist and then take its time to develop the "appropriate" criteria to determine if the waterbody is impaired. LDEQ must maintain these subsegments on the 303(d) list until it has data that show the standards are being attained. Despite LDEQ's unsupported statement that "[t]hese subsegments are expected to fully support minerals criteria in the future when assessed against more appropriate criteria," LDEQ presented no data to support a conclusion that the water quality standards are being attained in these waterbodies. Even assuming LDEQ is correct that the currently-assigned criteria are wrong, water quality standards are not just composed of the criteria; they include the designated uses. LDEQ provided no data to support its conclusion that the subsegments to fully support yet-to-be-developed criteria; how can the agency find that the subsegments will support nonexistent unknown criteria? Further, even if LDEQ is correct that the criteria are wrong, this is not a basis to place a waterbody in IRC 3, which is for waterbodies for which there is inadequate data to determine if the standards are being attained.

Those "standards" referenced are the current standards. LDEQ did not state that it cannot tell if the current standards are being attained. In fact, it knows they are not being attained. It just thinks the criteria aspect of the standard is wrong. This is not an issue for delisting; this is an issue for the development of site-specific criteria. Unless and until LDEQ develops these criteria and then supports that these waterbodies are meeting those new criteria, these waterbodies must remain on the list.

In the case of EPA's proposed turbidity listings, these are necessary because LDEQ provided no justification for these delistings. Though in its Rationale it discussed consolidating the suspected impairment causes for TSS and SS to Turbidity, this does not explain or support the delisting of several waterbodies formerly listed for Turbidity. No other explanation or supporting documentation was provided by LDEQ.

EPA Response

EPA acknowledges the above comment and concurs with the commenter's conclusion to add to the Louisiana 2014 § 303(d) list 38 segments and corresponding 88 segment-pollutant pairs for failing to meet currently established minerals criteria; and two segments and corresponding two segment-pollutant pairs for failing to meet currently established turbidity criteria.

Attachment 1. Analysis of salinity values collected at LDEQ Ambient Water Quality Monitoring Network stations.

Figure 1. Subsegment LA040304_00, Site 0239, Gray's Creek north of Port Vincent, LA. (n=42)



Figure 3. Subsegment LA030803_00, Site 0843, Beckwith Creek east of DeQuincy, LA. (n=36)



Figure 2. Subsegment LA050103_00, Site 0649, Bayou Mallet north of Iota, LA.



Figure 4. Subsegment LA050601_00, Site 0098, Bayou Lacassine near Lake Arthur, LA. (n=47)



Attachment 1. Analysis of salinity values collected at LDEQ Ambient Water Quality Monitoring Network stations.

Figure 5. Subsegment LA040505_00, Site 1112, Ponchatoula Creek at Hwy. 22.



Figure 7. Subsegment LA040603_00, Site 1121, Selsers Creek at Weinberger Rd, SE of Ponchatoula, LA. (n=39)



Figure 6. Subsegment LA050603_00, Site 0658, Bayou Chene south of Welsh, LA.



Figure 8. Subsegment LA030702_00, Site 0841, English Bayou north of Chloe', LA. (n=44)



Attachment 1. Analysis of salinity values collected at LDEQ Ambient Water Quality Monitoring Network stations.



Figure 9. Subsegment LA030702_00, Site 0131, English Bayou near Lake Charles, LA. (n=62)