



Tulane Environmental Law Clinic

December 29, 2011

**Via Email to smith.diane@epa.gov**

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U.S. Environmental Protection Agency, Region 6  
1445 Ross Avenue  
Dallas, TX 75202- 2733

**RE: Comments on the 2010 Integrated Report and Rationale on Water Quality in Louisiana.**

Dear Ms. Smith,

Please consider the following comments in support of EPA's November 30, 2011, proposed addition of subsegments 120806, 070601, and 021102 to Louisiana's 2010 303(d) list, and assignment of a priority ranking. The comments also object to EPA's failure to disapprove Louisiana's delisting of certain waterbodies without supporting documentation; EPA's decision to not add the Mississippi River and nearshore Gulf waters as impaired by Nitrate/Nitrite and Phosphorous pollution; EPA's decision to set low priority rankings and schedules (8-13 years) for the TMDLs for subsegments 120806, 070601, and 021102; and EPA's failure to promulgate TMDLs for these three subsegments. The Tulane Environmental Law Clinic submits these comments on behalf of the Gulf Restoration Network<sup>1</sup> (GRN) and the Louisiana Environmental Action Network<sup>2</sup> (LEAN). GRN and LEAN reserve the right to rely on all public comments submitted. We request a written response to all comments.

At the outset, we note that EPA recently issued a decision approving in part and disapproving in part Louisiana's 2008 Integrated Report. GRN and LEAN commented on

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<sup>1</sup> GRN is a non-profit corporation organized under the laws of the State of Louisiana. GRN, a regional coalition of almost fifty environmental and social justice groups, is committed to the protection and restoration of the resources of the Gulf of Mexico region. GRN staff provides technical assistance and support to communities in the states bordering the Gulf in opposing environmental threats to local waterbodies that jeopardize their communities.

<sup>2</sup> LEAN is a nonprofit corporation organized under the laws of the state of Louisiana. LEAN serves as an umbrella organization for environmental and citizen groups. LEAN's purpose is to preserve and protect the state's land, air, water, and other natural resources, and to protect its members and other residents of the state from threats of pollution. LEAN has members statewide.

several aspects of that draft report, including the failure of the State to list the nearshore waters of the Gulf of Mexico for Dissolved Oxygen (“D.O.”) in IRC5. For purposes of these comments, we stress that all of our objections to the 2008 list stand.

We also re-attach the affidavit with the expert testimony of Mark Quarles, P.G. (the “Quarles Affidavit”) at Attachment 1 and the letter to LDEQ from Dr. Eugene Turner with attachments at Attachment 2. The Quarles Affidavit and Mr. Turner’s letter are incorporated in full and by reference into these comments.

Also, we have referenced and attached several additional documents at Attachments 3 through 6, which are incorporated in full.

### **SPECIFIC COMMENTS**

#### **I. EPA’s Decision to List Subsegments 120806, 070601 and 021102 of Louisiana’s Coastal Waters Violate the Numeric Criteria for Dissolved Oxygen is Correct.**

EPA’s supporting data in its administrative record, upon which LDEQ also based its finding of impairment, clearly shows that D.O. in all three subsegments consistently fell below the numeric criterion during the summer months.

As is well known, and as was a central topic of GRN’s comments on Louisiana’s 2008 Integrated Report, a hypoxic zone (“Dead Zone”) forms in the nearshore and other waters of the Gulf of Mexico each summer. Hypoxia occurs when D.O. levels reach 2mg/L or below. Therefore the Dead Zone, as well as surrounding waters, have shown D.O. levels that have fallen well below the 5 mg/L as required by Louisiana regulations (La. Admin. Code tit. 33, pt. IX, §1113.C.3.c). 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, have documented that this low D.O. occurs in nearshore waters.

Dr. Rabalais’ most recent documentation of the Dead Zone, as well as her documentation from 2008 that GRN and LEAN provided to LDEQ on the 2008 303(d) list, is included at Attachments 3 and 4.<sup>3</sup> Also, a 2010 press release with maps compiled from data collected in 2009 is attached as Attachment 5 and available at:

<http://www.gulfhypoxia.net/Research/Shelfwide%20Cruises/2010/PressRelease2010.pdf>.

Attachment 3, the 2010 LUMCON data, shows that all of the sampling points within the 3-mile limit had extremely low oxygen levels. While this data had not been quality controlled when GRN and LEAN acquired it, the ongoing hypoxia monitoring by Dr. Nancy Rabalais and others out of LUMCON and other institutions should be included in each Integrated Report. The

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<sup>3</sup> Note that the 2010 LUMCON raw data has not yet been quality controlled; LDEQ and EPA should continue to pursue this information, given its direct relevance to the issue of nearshore water impairment and the specific federal regulatory provisions that require LDEQ to evaluate and assemble “readily available information” from “academic institutions.” 40 C.F.R. §130.7(b)(5).

2010 data underscores the fact that the nearshore waters are impaired. The long term data from the yearly hypoxia measurement cruises demonstrates that this is a persistent problem that cannot be solved by the Hypoxia Taskforce, or other reliance on voluntary measures. The nearshore segments must remain on IRC5 for D.O. and nutrients, and LDEQ should immediately start working with EPA to develop a TMDL for these waters.

In its Public Notice Rationale, LDEQ stated that EPA Region 6 provided additional water quality data for the Gulf of Mexico. Upon GRN and LEAN's request, LDEQ provided this EPA-supplied data. This data, particularly when considered in conjunction with the LUMCON data, demonstrates that all nearshore subsegments of the Gulf of Mexico are impaired for D.O.

First, it is important to note, when addressing D.O. levels in the Gulf, that the water quality standard (5.0 mg/L), not necessarily hypoxia, should be the level at which impairments should be assessed in Louisiana's waters within the 3-mile limit (nearshore waters). EPA's spreadsheet included LUMCON Data, EPA GED Data, and SEAMAP long-term trawl data. Each of these data sets show low levels of D.O., which is consistent with long-term measurements of the hypoxic zone in the Gulf of Mexico. Not only do they show that D.O. levels reach unacceptably low levels, they also show that the situation has not improved over time, despite the existence of the Hypoxia Taskforce, and Hypoxia Action Plan. Given the persistence of the impairment over time, and the lack of improvements from the Taskforce or Plans, Gulf nearshore waters must be in IRC5, which would require a TMDL.

Further, it is unclear why LDEQ noted, regarding the SEAMAP Long-term trawl data, that "this is some long-term trawl data collected by SEAMAP and provided to DEQ by EPA Region 6. It was not used in the 2008 or 2010 IR analysis due to complications inherent in the dataset." This explanation was not adequate to explain why the data were not used. It appears to be a robust dataset, noting significant D.O. impairment in nearshore waters (since 2006, approximately 40% of the deepwater samples were less than 5 mg/L D.O., and 21% of the mid-water samples were less than 5 mg/L). While LDEQ's Attachment 1 from its Response to Comments on the 2008 list states difficulties in using this data to "determine the precise spatial extent of the hypoxic zone," the data still shows the existence of areas that violate the water quality criterion for D.O. Further, the data covering short time periods is not a valid reason to discard the data, as much of the data suggests the violation of water quality standards.

The EPA and the State of Louisiana have been aware of this problem for years. The LDEQ provided a discussion of the problem in its Response to Comments on both the 2008 and 2010 303(d) lists. As a result of GRN and LEAN's 2008 and 2010 comments on listing the nearshore waters of the Gulf of Mexico for D.O., Nitrate/Nitrite and Phosphorus, LDEQ reviewed various datasets that it obtained from both GRN, LEAN and other sources. LDEQ analyzed this data and ultimately acknowledged that 3 subsegments of the nearshore waters of the Gulf are impaired for low D.O.: 021102 – the Barataria Basin Coastal Bays and Gulf Waters to the State Three-Mile Limit; 070601 – Mississippi Basin Coastal Bays and Gulf Waters to the State Three Mile Limit; and 120806 – Terrebonne Basin Coastal Bays and Gulf Waters to the State Three-Mile Limit. However, LDEQ then decided to put these 3 subsegments in Category 4b rather than Category 5.

EPA correctly concluded that LDEQ's placement of these 3 subsegments in category 4b is improper. Category 4b is reserved for situations where controls are already in place that are demonstrably sufficient to achieve water quality standards. It requires that the alternative control measures be "expected to result in attainment of designated uses." EPA guidance provides further clarification: "EPA would like to reiterate that States have the opportunity to assign impaired waters to Category 4b where controls sufficient to achieve water quality standards in a reasonable period of time are already in place."<sup>4</sup> EPA requires states to demonstrate how the alternative pollution controls will achieve the water quality standards, show that the controls are actual requirements, estimate the time it will take for the controls to achieve the water quality standard, and provide a schedule for implementing the controls.<sup>5</sup>

EPA appropriately found that the control which LDEQ relies on, the Gulf Hypoxia Action Plan (GHAP), falls far short of these requirements. LDEQ discusses the GHAP's "goal" of reducing the Dead Zone by 2015, and states that it would have longer to perform a TMDL. But a "goal" which is nowhere near being realized in even the smallest amount is not a "schedule" as required by law. The GHAP is unenforceable, a "plan" with absolutely no teeth and no progress despite years of "implementation." Although the first GHAP was developed in 2000, and has subsequently been revised, it has achieved no demonstrated reduction in the Dead Zone or the D.O. impairment in federal or state Gulf waters. The most recent GHAP explicitly states that the plan will rely on voluntary measures. Given the lack of reduction of the Dead Zone over the past ten years, the GHAP—or any other current plans—can hardly be considered an alternative control measure that can be expected to result in attainment of designated uses.

## **II. EPA's Priority Ranking Does Not Properly Take Into Account the Urgency of Action Required to Reduce the Hypoxic Zone.**

EPA properly assigned the subsegments at issue a priority ranking pursuant to CWA § 303(d), 33 U.S.C. § 1313(d). Congress intended for all waters on the 303(d) list to have a priority ranking based upon the severity of the pollution. *Id.* Therefore, EPA properly determined that, in placing the subsegments on Louisiana's 303(d) list, a priority ranking was necessary.

However, in assigning a priority ranking for TMDL development, EPA assigned all three subsegments the lowest ranking, setting the timeframe for developing a TMDL at 8-13 years. Congress discussed the priority ranking of waters in section 303(d)(1)(A) of the Clean Water Act, 33 U.S.C. § 1313(d)(1)(A). And EPA guidance supplements this language. Section 303(d)(1)(A) of the Clean Water Act requires that States take into account the designated use of the waters and the severity of the pollution in establishing priority rankings. EPA supplemented these requirements with various guidance, which EPA relied upon in making its determination of priority ranking for these subsegments. EPA Decision Document at 10. However, EPA did not properly rank the waters based upon these factors.

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<sup>4</sup> October 12, 2006, EPA, Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions (hereinafter "2006 Guidance") at 5-6.

<sup>5</sup> *Id.* at 5.

EPA should rank the Gulf coastal water subsegments higher based upon the severity of the pollution there. Hypoxic conditions can persist for several months of the year, and make the marine environment unsuitable for aquatic life. LUMCON, *What is Hypoxia?* <http://www.gulfhypoxia.net/Overview/>. Once waters reach hypoxic levels, they have fallen far below the lower limit of D.O. necessary to support aquatic life as determined by Louisiana. This represents severe pollution impacting a designated use, and the data proves that it is still growing. The priority ranking assigned by EPA will allow the problem to grow even worse before beginning to address it, which will make the solution that much harder to achieve.

Additionally, in its 1991 guidance, EPA provides that States should consider economic factors and the degree of public support when setting a priority ranking. These factors require a higher ranking than the one EPA proposes to establish, which is the lowest ranking possible.

The coastal waters of Louisiana and the aquatic life that inhabit them are a vital economic resource for Louisiana, its coastal communities, and the nation as a whole. EPA itself has recognized this. See <http://www.epa.gov/gmpo/about/facts.html>. Low levels of D.O. create large areas where trawlers are unable to catch anything significant. The LUMCON 2007 press release stated that areas with low D.O. were noticeable by the lack of any trawlers in the area. The seafood industry represents a multi-billion dollar industry and is the livelihood of many Louisiana residents. The low levels of D.O. reduce the total area which can be fished and trawled, thereby reducing the ability of the local communities to earn a living. The importance of these waters to the livelihood of the people of Louisiana requires a higher priority ranking than the one EPA issued.

There is also currently strong public support for the restoration and preservation of these waters. Over the years hundreds, if not thousands of letters, postcards, and emails have been sent to EPA stating the importance of reducing nitrogen and phosphorous pollution and reducing the size of the Dead Zone. Because the waters are an important part of the local economy, there is a tremendous amount of public support and interest in making sure that the waters remain a viable resource. These are high profile areas, and the current priority ranking of 8-13 years does not reflect the public's desire to get them cleaned up.

Taking the severity of pollution, the economic consideration, and the public support for the area into account, EPA should set a higher priority ranking than the 8-13 year priority ranking.

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

EPA should promulgate TMDLs for Subsegments 120806, 070601 and 021102 in accordance with the statutory language of 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.

#### **IV. EPA Should Require LDEQ to Classify Certain Waterbody Segments as Category 5 for Nitrate/Nitrite and/or Total Phosphorus.**

In the 2010 Rationale, LDEQ states that “IRC 3 was also used for cases where nitrate/nitrite nitrogen and/or total phosphorus were reported as a suspected cause of impairment.” Rationale at ¶ 1, p. 9. LDEQ explained this decision as resulting from the State’s lack of nutrient criteria, which then makes it “impossible to know if nutrients are in fact causing impairment.” Rationale at ¶ 1, p. 9.

In its Decision Document, EPA should have disapproved this approach. Instead, EPA decided to evaluate these nutrient loads only as a part of the process of creating TMDLs for D.O.:

“Currently, numeric nutrient standards or ratios for nutrients in State coastal segments have not yet been established. Without data definitively attributing the low dissolved oxygen levels in these segments to nitrogen and phosphorus, EPA did not believe it was appropriate to list the segments for nitrogen or phosphorus. However, EPA determined there was sufficient information to list these segments based on the exceedance of applicable dissolved oxygen criteria. During the TMDL development, nutrients and other contributing factors will be evaluated to determine to what degree nutrients are contributing to the coastal segment impairments.”<sup>6</sup>

This decision is wrong factually and legally. First, LDEQ is wrong when it states that “Louisiana does not currently have nutrient criteria.” Rationale at ¶ 1, p. 9. Though Louisiana has not yet promulgated numeric nutrient criteria, it has narrative, or “general” nutrient criteria, which constitute applicable law. LAC 33:IX.1113.B. LDEQ can and must use narrative nutrient criteria to determine impairment. LDEQ’s additional excuse for changing all Category 5 nutrient impairment listings to Category 3 or 4b, that these 303(d) list listings were mere “evaluative assessments” made by regional staff and were not based on monitoring data, is simply irrelevant under the law.<sup>7</sup> Once a waterbody segment is placed on the 303(d) list, delisting it (to category 3, 4b, 5RC, or any other category) requires LDEQ to justify the delisting by documenting and explaining the reasons.

Finally, the nitrate/nitrite nitrogen and/or total phosphorus impairment must be considered and evaluated independently, and not relegated to an afterthought as part of the TMDL development process for D.O. Although these types of impairments are often related, they can also exist independently. EPA’s current approach would allow LDEQ to avoid evaluating or listing any waters in the State as impaired for nitrate/nitrite nitrogen or total

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<sup>6</sup> EPA, Decision Document For Louisiana’s 2010 § 303(d) List, at 9 (Nov. 17, 2011), available at [http://epa.gov/region6/water/npdes/tmdl/303d/la/2010\\_rod\\_v2.pdf](http://epa.gov/region6/water/npdes/tmdl/303d/la/2010_rod_v2.pdf).

<sup>7</sup> LDEQ uses this explanation then, elsewhere in the Rationale, it states that it allowed regional staff to weigh in and contradict an impairment demonstrated by the monitoring based on their “valuable input” and “professional judgment.” Rationale at 9. So, while staff opinion (i.e., evaluation) is reliable enough to reject monitoring data showing impairment, it is not reliable enough to support an impairment determination absent monitoring data.

phosphorus impairment unless and until a particular waterbody is first listed as impaired for low D.O. and LDEQ has started developing a TMDL.

*A. LDEQ Should Include on Its § 303(d) List Nearshore Waters West of the Mississippi River for Nitrate/Nitrite and Phosphorus.*

EPA must also consider the evidence offered by Dr. Rabalais in comments on the Mermentau Coastal Bays and Gulf Waters TMDL for D.O. and Nutrients.<sup>8</sup> This data is relevant to the issue of the impairment of nearshore waters of the Gulf. Failure to consider it violates EPA regulations at 40 C.F.R. §130.7(b)(5), which requires that each State “assemble and evaluate all existing and readily available water quality-related data and information to develop the list. . . .” In particular, this data fits under the following category of “readily available data” specified in this regulation: “Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions. These organizations and groups should be actively solicited for research they may be conducting or reporting.” *Id.* at 130.7(b)(5)(iii). The status of the Gulf and the Dead Zone has been extensively reported and studied; LDEQ must make use of this readily-available information for purposes of this list. The data supports a listing of not only the three subsegments listed as impaired by LDEQ, but all nearshore subsegments, including subsegments 010901, 021102, 031201, 050901, 061201, 070601, 110701, 120806 for low D.O.

EPA should reconsider its finding that “[w]ithout data definitively attributing the low D.O. levels in these segments to nitrogen and phosphorus, EPA did not believe it was appropriate to list the segments for nitrogen or phosphorus.”<sup>9</sup> Low D.O. is the symptom of the nitrogen and phosphorus flowing into the Northern Gulf of Mexico.<sup>10</sup> Because of this, subsegments 010901, 021102, 031201, 050901, 061201, 070601, 110701, 120806 must also be listed for phosphorus and nitrate/nitrite. We recognize that Louisiana is not responsible for the majority of the nitrate/nitrite and phosphorus pollution. However, this fact is not relevant to the 303(d) listing of impaired waters (40 C.F.R. § 130.7(b)(1)).

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<sup>8</sup> Attachment 6. Though LDEQ noted that EPA, in its response to the Mermentau comments, found that this data did not implicate a dead zone, Attachment 1 at p.1, EPA found this only with respect to that particular subsegment, the Mermentau Basin, #050901. EPA concluded by specifically stating that “EPA believes that this data [the Rabalais data], along with any additional data related to this subsegment or data from the hypoxia sampling program, if determined to be existing and readily available data and information, should be considered in the development of the . . . section 303(d) list.”

<sup>9</sup> EPA, Decision Document For Louisiana’s 2010 § 303(d) List, at 9 (Nov. 17, 2011), available at [http://epa.gov/region6/water/npdes/tmdl/303d/la/2010\\_rod\\_v2.pdf](http://epa.gov/region6/water/npdes/tmdl/303d/la/2010_rod_v2.pdf).

<sup>10</sup> See U.S. EPA, Science Advisory Board, *Hypoxia in the Northern Gulf of Mexico*, (2008), [http://yosemite.epa.gov/sab/sabproduct.nsf/C3D2F27094E03F90852573B800601D93/\\$File/EPA-SAB-08003complete.unsigned.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/C3D2F27094E03F90852573B800601D93/$File/EPA-SAB-08003complete.unsigned.pdf); National Research Council Committee on the Mississippi River and the Clean Water Act, *Mississippi River Water Quality and the Clean Water Act: Progress, Challenges and Opportunities*, 44-45, 74 (2008), <http://nap.edu/catalog/12051.html>; Gulf Hypoxia Action Plan (2008), <http://www.epa.gov/msbasin/taskforce/pdf/ghap2008.pdf>.

*B. LDEQ Should Include on Its 303(d) List the Mississippi and Atchafalaya Rivers for Nitrate/Nitrite and Phosphorus and Dissolved Oxygen.*

Nitrogen and phosphorus pollution flowing down the Mississippi River in 2010 caused one of the largest Gulf of Mexico Dead Zones ever recorded. And researchers have stated that it might have rivaled the largest if they had been able to complete their 2010 survey.<sup>11</sup> Yet, LDEQ has not listed the Mississippi (Subsegments 00101, 070201, 070301, 070401) or Atchafalaya (Subsegments 010101, 010201, 010301, 010401, 010501) Rivers as impaired for these pollutants (nitrate/nitrite and phosphorus). As stated in Dr. Eugene Turner's attached letter, the unnaturally low D.O. in Louisiana's nearshore waters is caused by the nitrogen and phosphorus flowing down the Mississippi and Atchafalaya Rivers. Because of this fact, both of these rivers must also be listed for low D.O., nitrate/nitrite, and phosphorus. As stated above, we recognize that Louisiana is not responsible for the majority of the nitrate/nitrite and phosphorus pollution. However, this does not preclude the 303(d) listing of these impaired waters (40 C.F.R. § 130.7(b)(1)).

In its 2010 Response to Comments, LDEQ stated that it would not list these subsegments for nutrients because the lack of numeric nutrient criteria precluded it from accurately assessing the rivers for nutrient impairments. In its 2010 Response to Comments, LDEQ stated:

“Louisiana’s ERC does not currently contain numerical criteria for nitrate/nitrite or phosphorus; therefore, there is no numerical basis for assessing these waters for these nutrient values. LDEQ is developing nutrient criteria for Louisiana waters as part of its plan, *Developing Nutrient Criteria for Louisiana*, which can be found on the LDEQ Web site. Further, dissolved oxygen concentrations in both rivers are well above the dissolved oxygen criterion of 5.0 mg/L. Based on established assessment protocols this indicates that neither river is impaired by nutrients or DO. For more information on this process please see the 2010 IR, Part III, Chapter 2, 2010 Water Quality Assessment Procedures, Nutrient Assessment Procedures. See also LDEQ response to TELC comment 2 and 5.”

First, this explanation ignores the fact that LDEQ has narrative criteria and also ignores the fact that LDEQ must consider downstream impacts.<sup>12</sup> LDEQ already acknowledged that nutrients in these rivers are a major cause of the Dead Zone. Second, LDEQ’s explanation provides no support for its leap that, because the rivers do not experience low DO, this also means they are not impaired for nutrients. The relationship between DO and nutrients is complicated; high DO levels are not necessarily indicative of low nutrient levels. This is particularly true in fast moving, high volume streams like these, where reaeration is significant in raising DO levels.

In fact, a review of the data supplied by EPA Region 6 to LDEQ supports a conclusion that the Mississippi River is indeed impaired for D.O. EPA’s data shows multiple instances of D.O. levels below the water quality standard in the Mississippi River Passes (segment 070401). In this segment the minimum D.O. level allowed is 4 mg/L. Several of the measurements in this data set have GPS coordinates that fall within this segment (portions of stations M00, M01, M02,

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<sup>11</sup> See <http://www.gulfhypoxia.net/News/default.asp?XMLFilename=201009071001.xml>.

<sup>12</sup> See 40 C.F.R. §131.10(b).



M03, and M04; mostly in Southwest Pass). Taking into account the data set that falls within the segment (the years 2002-2007), approximately 16% of the data violate the D.O. criteria. According to the Integrated Report, this would place this segment in the “partially supporting” category, which, according to Footnote 3, requires a TMDL. Further, if one considers the data from just 2006-2007, approximately 27% of the data points within the segment violate the D.O. standard, which would place it in the “not supporting” category.

Though LDEQ’s ambient monitoring does not show similar D.O. levels, given the EPA-supplied data, it would be prudent for LDEQ to place segment 070401 in IRC5, as impaired for low D.O.

Although LDEQ states that it is working to establish nutrient criteria for State waters, this effort has yet to yield numeric standards. Indeed, LDEQ does not list nutrients as a parameter in table II of the IR rationale. Yet LDEQ does list phosphorus or nitrates/nitrites as the source of impairment for a waterbody. LDEQ must clarify what nutrient testing is conducted for water bodies, and why LDEQ will not list the Mississippi River and nearshore coastal waters for nutrient impairment.

**V. EPA Should Disapprove LDEQ’s Methodology Where It Fails to Adequately Protect Water Quality.**

*A. LDEQ Provides Insufficient Data to Justify Its Delistings.*

LDEQ fails to provide documentation for water bodies that have been delisted from previous 303(d) lists. 40 C.F.R. § 130.7(b)(6) requires 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’s 2010 Integrated Report has delisted several water bodies. In many instances, LDEQ delisted certain water bodies by moving them from IRC Category 5 to another IRC category. Some examples follow.

*1. Waterbodies Reclassified from IRC 5 to IRC 3.*

A comparison of the 2008 Integrated List to the 2010 List shows at least seven waterbody segments that had been listed as IRC 5 for nutrients in 2008, but were reclassified as IRC 3 in 2010. These segments include: LA040303\_00, LA040304\_00, LA040305\_00, LA040505\_00, LA040603\_00, LA041202\_00, and LA100801\_00. IRC 3, according to LDEQ, represents categories where “[t]here is insufficient data to determine if uses and standards associated with the specific WIC cited are being attained.” Rationale at Table 3.

LDEQ provides neither rationale in any publicly-noticed documents for these delistings, nor supporting documentation.<sup>13</sup> Without rationale or documentation supporting the removal of these water bodies, they must remain in IRC 5. In response to objections to the 2010 Integrated Report, LDEQ asserted that “[t]he rationale for moving the noted nutrient impairments from IRC 5 to IRC 3 is stated in the publicly noticed 2010 IR Rationale in paragraph 1 on page 9.” (2010 Response to Comments). But the explanation found in that paragraph is insufficient under the law. According to the LDEQ, its “regional staff members were asked for input regarding significant suspected sources of impairment or whether impairment was due solely to natural sources.... In cases where there is uncertainty as to the suspected cause but no anthropogenic sources are strongly suspected, then IRC 3 was used.” (2010 IR Rationale at ¶ 1, p. 9.) By this standard, LDEQ could remove waterbody segments from the 303(d) list without further justification other than a regional staff member’s best guess. LDEQ must provide specific justification for each delisted waterbody.

A mere change in approach to how LDEQ wishes to treat 303(d)-listed waterbodies is insufficient under the law. Indeed, it is incongruous for a waterbody to have been listed based on data, whether monitoring data or “evaluative” data, and then for LDEQ to declare that it has insufficient data. Once the waterbody is listed, unless a TMDL (or other sufficient control) is completed, LDEQ must actively provide data to delist it. This is supported by EPA guidance. EPA guidance on good cause states:

Good cause includes, but is not limited to, more recent and accurate data, more sophisticated water quality modeling, flaws in the original analysis that led to the waterbody being listed, or changes in conditions, e.g. new control equipment, or elimination of discharges. Where a waterbody was previously listed based on certain data or information, and the state or territory removes the waterbody without developing or obtaining any new information, EPA will carefully evaluate the state’s or territory’s re-evaluation of the available information, and will not approve such removals unless the state’s or territory’s submission describes why it is appropriate under the current regulations to remove each affected waterbody.

November 19, 2001, EPA, 2002 Integrated Water Quality Monitoring and Assessment Report Guidance at Introduction.

## 2. Waterbody Reclassified from IRC 5 to IRC 4a.

In its comments to LDEQ’s draft 2010 listing, GRN and LEAN noted that Segment LA081503\_00 was classified as IRC 5 for D.O. on the 2008 list, but LDEQ has reclassified it as IRC 4a (“WIC exists but a TMDL has been completed for the specific WIC cited”) for D.O. on the 2010 list. A search of both LDEQ and EPA’s list of water bodies having TMDLs did not show a TMDL for D.O. in LA081503\_00.

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<sup>13</sup> If LDEQ has produced or ends up producing such documentation or rationale, it should actively provide this to the public and allow public comment.

In response, LDEQ stated that “With regard to LA081503\_00 a Load Allocation for dissolved oxygen was completed in approximately 1997. At that time a Load Allocation was considered equivalent to a TMDL for §303(d) purposes. This determination has been approved by EPA Region 6 since that time period.” GRN and LEAN are unaware of any law that allows a Load Allocation to permanently substitute for a TMDL.

*B. LDEQ Provides Insufficient Information to Determine the Adequacy of Its Monitoring.*

LDEQ explains that it monitored the State water bodies based on a rotating schedule over a 4-year period, which resulted in ¼ of the State waterbody segments being tested every year (Rationale at 1). However, in its 2008 IR Rationale, it included a table, Table 1, that listed the monitoring schedule for each of the 12 basins. For the 2010 list, it removed this table, replacing it with a Table 1 that provided no useful information. The new Table 1 simply lists the years of sampling for four listed monitoring cycles without providing any information on which basins belong in which cycles. Rationale at 2. In the 2010 Response to Comments, LDEQ argues that its monitoring program is now statewide rather than limited to certain basins: “the 2010 Rationale update does not require specific basins because monitoring is now statewide instead of basin by basin. This statewide nature was pointed out on page 2 of the 2010 Rationale in bullet 2.” But LDEQ should provide more detailed information in the Rationale as to which waterbodies are monitored which years.

Another significant source of confusion in this aspect of the Rationale involves figuring out how many samples the agency used to evaluate the waterbodies. LDEQ states that its monitoring schedule resulted in twelve monthly samples for each waterbody subsegment. Rationale at 3. But then it explains that at least five samples were required for most parameters for the assessment to be valid. This leaves a question as to whether and when LDEQ used all of the available sampling results for each waterbody (12) or whether and when it used some samples and did not use others (resulting in 5). This explanation is particularly necessary where a waterbody segment was delisted. In the 2010 Response to Comments, LDEQ argued that it uses all data that meets Quality Assurance/Quality Control (QA/QC) protocols. “LDEQ in no way chooses some data over others, except in so far as QA/QC protocols permit. Sample sizes below the expected 12 for any parameter are generally related to problems encountered during sampling or laboratory analysis.” But this explanation is vague and insufficient, particularly where waterbodies were delisted.

*C. LDEQ Must Provide Details on its Use of Downstream Testing to Determine Water Quality of a Waterbody.*

On page 3 of the Rationale, LDEQ says that it used data from “within or immediately downstream” of a waterbody subsegment to evaluate that subsegment’s water quality. In the 2010 Response to Comments, LDEQ argues that it has improved its description of “immediately downstream” in the final version of the IR text. But this description still does not adequately explain the appropriateness of such data for determining the condition of a different, upstream waterbody. While GRN and LEAN feel that it is important that a segment’s water quality both protect the segment and downstream uses, the use of downstream samples may misrepresent the

upstream segment water quality, potentially indicating compliance with water quality criteria where there is none. *See Quarles Aff. at ¶ 12.*

Though LDEQ indicated in its 2010 Response to Comments that downstream data use is necessary in some instances because of access issues, LDEQ should state clearly which waterbody segments presented such access issues.

*D. LDEQ Did Not Include Information About the Methods it Used in Collecting the Data Used to Prepare the 2010 Integrated Report.*

The Rationale did not describe in detail the surface water monitoring methods that LDEQ used, such as describing grab sampling versus continuous monitoring, the sample size, and the seasonal duration of the sample lot, among others. Without such detail, the validity and the reliability of the data are questionable. *See Quarles Aff. at ¶ 7.* LDEQ should provide detailed descriptions of all methodology used to obtain the data upon which it based its water quality impairment decisions.

While LDEQ has indicated that this information is available on request, because the LDEQ provides no summary of changes in listings from the previous 303(d) list, it is difficult if not impossible for the public to know which situations to focus on in requesting additional information.

## CONCLUSION

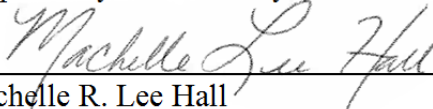
EPA correctly found that available data supports listing the nearshore waters of the Gulf of Mexico as impaired for D.O. LDEQ cannot justify placing these subsegments in Category 4b because its alternative measure, the Gulf Hypoxia Plan, is not a “control measure,” relies exclusively on voluntary measures, contains no schedules or deadlines beyond unenforceable, aspirational “goals,” and has had no impact whatsoever on the Dead Zone in its 10 years of existence.

The EPA correctly established a priority ranking for the nearshore waters of the Gulf of Mexico, but should have set a higher priority ranking given the importance of these waters and the urgency of the problem. Further, EPA should develop a TMDL for these nearshore Gulf waters.

Available data also supports listing the nearshore waters of the Gulf of Mexico as impaired for Nitrate/Nitrite, and Phosphorus, and listing the Mississippi River for both D.O. and nutrients, and the Atchafalaya River for nutrients. The absence of numeric criteria for nutrients is not an excuse for not listing these waterbodies, particularly where LDEQ has enforceable narrative or “general” criteria, and where LDEQ has developed nutrient targets many times for use in TMDLs.

LDEQ should also improve its protections in areas in which it departs from established EPA guidance; it must show that its failure to use EPA methodology provides at least as much protection for Louisiana waterbodies as the EPA methodology. Simply stating that EPA guidance is not binding is insufficient; LDEQ cannot arbitrarily and with no explanation pick some EPA guidance to apply and some to ignore. The most troubling example of this deviation from EPA-approved methods is in LDEQ’s reliance on “suspicions” by regional staff to delist waterbodies, and acting without authority or documentation.

Respectfully submitted by:

/s/   
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