APPENDIX F:

Public Comments on the 2020 Integrated Report and Louisiana Department of Environmental Quality's Response to Comments

The following is a compilation of all comments received regarding the 2020 Integrated Report (IR), along with the Louisiana Department of Environmental Quality's (LDEQ) response to those comments. During the public notice phase of the 2020 IR development, LDEQ conducted a thorough review of the U.S. Environmental Protection Agency's (USEPA) ATTAINS database. ATTAINS stands for **A**ssessment, **T**otal Maximum Daily Load (TMDL) **T**racking and **I**mplementation **S**ystem. Based on the review, eight corrections to IR categories were identified for the 2020 IR. The corrections affected Louisiana's § 303(d) list and are included below as Comment #1.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL ASSESSMENT
WATER PLANNING AND ASSESSMENT DIVISION

PUBLIC COMMENTS RESPONSE SUMMARY

2020 INTEGRATED REPORT ON WATER QUALITY IN LOUISIANA:
SECTION 303(d) LIST

AGENCY INTEREST (AI) NO. 169294

September 10, 2020

The LDEQ published a public notice of the draft Rationale for the *2020 Integrated Report on Water Quality in Louisiana: Section 303(d) List* on May 13, 2020 in the *Advertiser*, *Advocate*, *American Press*, *Courier*, *News Star*, *New Orleans Advocate*, *Times* and *Town Talk*, and on the LDEQ Public Participation Group, Public Notice webpage. The public notice ended on June 17, 2020.

The draft IR Rationale and § 303(d) List was available for review on the LDEQ Website and on the LDEQ's Electronic Data Management System (EDMS). The LDEQ received written comments on the draft IR Rationale and § 303(d) List by email. Complete comment documents from the public are available through LDEQ's EDMS at: https://edms.deq.louisiana.gov/app/doc/querydef.aspx, Document IDs, 12233600, 12233602, 12233603, 12233628, 12233712, 12233774, 12233772.

COMMENT #1

The ATTAINS database was developed by USEPA and used by states, including Louisiana, to record and track water quality assessment and TMDL information. During the public notice phase of the 2020 IR development information contained in ATTAINS was crosschecked against LDEQ's *Water Quality Management Plan (WQMP), Volume 8: Wasteload Allocations/Total Maximum Daily Loads and Effluent Limitations Policy*, and against a spreadsheet used by LDEQ's Water Permits Division (WPD) for IR assessment and TMDL documentation. The review was undertaken to begin consolidation and rectification of the three documents as much as possible. During review it was found that eight subsegments mistakenly assigned to IR Category (IRC) 5 (TMDL required to be developed) should have been assigned to IRC 4a (TMDL completed). This

oversite was caused by a TMDL having been developed for an impairment in one year, thus being assigned to IRC 4a, then becoming unimpaired in a subsequent year and becoming IRC 1 (not impaired), and then becoming impaired once again for the 2020 IR. For 2020 the impairments were initially, and incorrectly, placed in IRC 5 when they should have been placed in IRC 4a. Due to the biennial IR-cycle process, the TMDL for the impairment was effectively lost in the database and not relocated until the 2020 IR crosscheck process. While the Water Body Impairment Combinations (WICs) in question were not originally identified as IRC 4a in the public noticed 2020 IR assessment spreadsheet, the TMDLs were and remain in place. This oversite has been corrected in the ATTAINS database and final IR assessment spreadsheet (Appendix A). Water bodies and impairments affected are identified in Table 1.

Table 1.

Subsegments and suspected causes of impairment incorrectly identified as IRC 5 and changed to IRC 4a during review of the 2020 Integrated Report.

Subsegment Number	Subsegment Description	Suspected Cause of Impairment
LA040307_00	West Colyell Creek	Fecal Coliform
LA040803_00	Tchefuncte River from Hwy. 22 to Lake Pontchartrain	Dissolved Oxygen
LA040909_00	W-14 Main Diversion Canal	Fecal Coliform
LA081607_00	Trout Creek	Fecal Coliform
LA090204_00	Pearl River Navigation Canal	Dissolved Oxygen
LA100703_00	Black Lake and Clear Lake	Dissolved Oxygen
LA100901_00	Nantaches Creek from headwaters to Nantaches Lake	Fecal Coliform
LA110202_00	Pearl Creek	Fecal Coliform

COMMENT #2

All Criteria, including general criteria, were not assessed. Comment goes on to list the 13 general criteria found in LAC 33:IX.1113. B. General Criteria. These included:

1. Aesthetics
2. Color
3. Floating, suspended and settleable solids
4. Taste and odor
5. Toxic Substances
6. Oil and Grease
7. Foaming or frothing materials
8. Nutrients
9. Turbidity
10. Flow
11. Radioactive materials
12. Biological aquatic community integrity
13. Other substances and characteristics

(Healthy Gulf)

LDEQ RESPONSE TO COMMENT #2

LDEQ has no objective, quantitative way to determine support of general criteria such as aesthetics, floating/suspended/settleable solids, taste and odor, oil and grease, and foaming or frothing materials. However, these criteria are utilized to protect water bodies through investigative actions by the surveillance and enforcement functions of LDEQ, as well as by water permitting actions designed to prevent such general criteria from being impaired. In addition, some of the general criteria listed have numeric criteria for some designated uses. Specifically, suspended solids may be assessed for many water bodies based on turbidity criteria found in Louisiana Administrative Code (LAC) 33:IX.1113.B.9.b.i-v. LDEQ is currently investigating new turbidity criteria (a measure of suspended solids) for additional water bodies. Color is assessed based on color criteria for drinking water supply use water bodies. Toxic substances are assessed on all water bodies based on numeric criteria found in LAC 33:IX.1113.C.6 Table 1 (toxic substances) and Table 2 (metals and inorganics). The criteria found in Tables 1 and 2 are also protected through LDEQ water permitting actions. The presence or absence of oil and grease is evaluated during every ambient water quality network sampling event on every water body sampled by LDEQ. This is taken into consideration during the IR assessment process. Nutrients are addressed in LDEQ's response to Comment 4. Flow is protected in part through LDEQ's participation in review of water withdrawal projects as part of a multiagency effort created by the 2010 Louisiana Legislative Act 955 and a related Memorandum of Understanding, which was agreed to by the Louisiana Department of Natural Resources, the Louisiana Department of Wildlife and Fisheries (LDWF) and by the LDEQ. While not monitored or assessed as part of the IR process, radioactive materials are included in water quality permits where necessary. Biological aquatic community integrity is protected through the ambient water quality network sampling and IR assessment process using appropriate numeric criteria. There are currently no additional parameters included under LAC 33:IX.1113.B.13, Other Substances and Characteristics.

COMMENT #3

Coastal subsegments, including LA010901_00 (Atchafalaya coastal waters), LA021102_00 (Barataria coastal waters), LA050901_00 (Mermentau coastal waters), LA061201_00 (Vermilion-Teche coastal waters), LA070601_00 (Mississippi coastal waters), and LA120806_00 (Terrebonne coastal waters), should be listed as IRC 5 for dissolved oxygen, nitrate/nitrite, phosphorus. **(Healthy Gulf)**

LDEQ RESPONSE TO COMMENT #3

LDEQ has included LA021102_00 and LA070601_00 coastal waters on the § 303(d) list as category 5RC (Revise Criteria) since 2008. While not included in the comments, LDEQ also reported LA042209_00 (Lake Pontchartrain coastal waters) as well as several other coastal subsegments on the east side of the Mississippi River as impaired for low dissolved oxygen (DO), also in category 5RC, for the 2018 and 2020 IRs. Subsegment LA120806_00 was evaluated in 2018 and again in 2020 using new information and found to be supportive of DO criteria due to the shallower water and better mixing found in the subsegment. LDEQ identified no additional data or information between the 2018 and 2020 IR cycles that was suitable for hypoxic zone evaluations within the territorial waters of Louisiana for the coastal subsegments of LA010901_00, LA050901_00, and LA061201_00.

COMMENT #4

In the absence of numeric nutrient criteria, nutrient assessments should be conducted using the narrative criteria of "The naturally occurring range of nitrogen-phosphorus ratios shall be maintained…" **(Healthy Gulf)**

LDEQ RESPONSE TO COMMENT #4

As stated in the 2018 IR response to comments, Louisiana has been attempting to develop numeric nutrient criteria since the mid-1980s. The length of time this effort has already taken is indicative of the difficulties involved in setting accurate and defensible nutrient criteria. Louisiana is not alone among States in finding nutrient criteria development difficult. Part of the narrative criteria requires knowing the "naturally occurring range of nitrogen-phosphorus ratio" to be maintained. LDEQ is currently working to develop an assessment protocol for detecting nutrient impairment in Louisiana's inland rivers and streams. This protocol will include the use of numeric translators – a method recommended by the U.S. Environmental Protection Agency. Many parameters including the nitrogen-phosphorus ratio are being explored as possible translators of nutrient impairment in this effort.

COMMENT #5

IRC 5-Alt (Alternative) is not necessary and could be detrimental to the TMDL program **(Healthy Gulf)**

LDEQ RESPONSE TO COMMENT #5

As was noted in the 2016 and 2018 IR response to comments, IRC 5-Alt is included in the current guidance developed by USEPA and States. The guidance is known as the *Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program* ("New Vision") (https://www.epa.gov/tmdl/new-vision-cwa-303d-program-updated-framework-implementing-cwa-303d-program-responsibilities, and https://www.epa.gov/sites/production/files/2015-07/documents/acwa_qa.pdf). WICs reported as IRC 5-Alt are considered "on the § 303(d) list" and are, therefore, within guidance set by USEPA.

COMMENT #6

The Integrated List lacks adequate prioritization. Also, priority waters listed in Table 10 for § 303(d)/Vision water bodies do not have final pollution plans that should have been completed by 2020. **(Healthy Gulf; Baton Rouge Group of the Sierra Club (Sierra Club); Louisiana Environmental Action Network (LEAN)**

LDEQ RESPONSE TO COMMENT #6

Prioritization for TMDL development is based in part on the workload of LDEQ's staff of engineers assigned to such tasks. The department is currently focused on addressing priority water bodies selected for the § 303(d)/Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act (CWA) § 303(d) Program (New Vision). Priority water bodies assigned to the § 303(d) New Vision Program were prioritized separately from the overall TMDL prioritization in the IR. This is the reason most other water bodies on the § 303(d) List are considered low priority at this time. It should be noted that the § 303(d) List, by regulation,

prioritizes a WIC as a high priority for TMDL development only when the TMDL is expected to be developed within the next two years (40 CFR 130.7(b)(4)). Which in the case of the 2020 IR is between 2020 and 2022. Correspondingly, watershed-based plans (TMDL alternatives) are listed with a low priority for TMDL development. All water bodies in Louisiana, whether they are on the § 303(d) list or not, are addressed with protective actions through water quality standards, water permitting, and, in many cases, nonpoint source control measures.

The § 303(d)/New Vision allows LDEQ to commit its resources to solving specific, known water quality issues. The New Vision approach to the TMDL program has provided states the ability to develop tailored strategies to achieve water quality goals. LDEQ is utilizing watershed-based plans to address water quality issues for priority water bodies established under the New Vision approach. These water quality issues tend to be very complex, often with many layers and unknown factors. Watershed-based plans, as being conducted by LDEQ, are much more resource intensive than traditional TMDLs. These plans include multiple potential strategies, including multi-year monitoring, evaluation of all potential loading sources and their likelihood to influence instream loading, extensive public outreach and education, and integration with various water programs. LDEQ is also considering the impacts of hydrologic alterations on water quality. These strategies are expected to lead directly and indirectly to load reductions and improvements in water quality. This process will take multiple years and will continue after reports are complete.

COMMENT #7

All assimilation wetlands were not assessed including: Tchefuncta Club Estates (AI# 19187), Guste Island (AI# 122552), Riverbend (AI# 19244), and Central/New Orleans (AI# 4859). **(Healthy Gulf; Pontchartrain Conservancy (PC) (formerly Lake Pontchartrain Basin Foundation**

LDEQ RESPONSE TO COMMENT #7

The wetland assimilation areas listed by Healthy Gulf and PC are not regulatory subsegments and, therefore, not subject to IR assessment procedures. All of them are overseen by LDEQ WPD based on permit limitations and adaptive management practices plans for protection and improvement of the wetlands. The WPD conducts their own assessment for each assimilation wetland, which can be found in EDMS for each permittee. Additionally, St. Bernard Parish (Riverbend) was first permitted in 2018 and does not yet have enough data for assessment. Guste Island was planted and trees have just recently reached the necessary minimum 10 cm in diameter at breast height.

As new wetland reports become available for all wetland assimilation areas, including those noted by the commenters, assessments will be developed and included in future IRs. Future assessments will follow protocols used in the 2018 and 2020 IR, unless regulatory changes dictate new protocols. However, as was noted in the 2018 IR Response to Comments (LDEQ 2018, Appendix F), and as noted above, assessments for wetland assimilation areas not found in LAC 33.IX.1123, Table 3 will not be included in ATTAINS or the final assessment spreadsheet released to the public.

COMMENT #8

LDEQ relied on permittee supplied data for wetland assimilation area assessments and included no water quality parameter data. **(Healthy Gulf; Dr. R. Eugene Turner (hereafter referred to as Turner))**

LDEQ RESPONSE TO COMMENT #8

All permittees are required to follow the same sampling methods using the protocols outlined in their permit and Louisiana's *WQMP, Volume 3, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Version 8.* The required protocols are taken from the Code of Federal Regulations (CFR) when available. Methods not outlined in the CFR are standard methods readily available in literature and are clearly outlined in each permit and the WQMP. As with other Louisiana water discharge permits, water quality data for wetland assimilation areas is collected by the municipality or its hired consultant using the requirements of the facility's water discharge permit. Failure to follow specified sampling protocols is a violation of the permit. The data is then provided to LDEQ as part of each permittee's Discharge Monitoring and Annual Wetland Monitoring Reports and used accordingly by the LDEQ WPD and by the Enforcement Division (ED). Both water quality data and biological data provided by facilities are used by the WPD as part of its own analysis and review for each wetland. Water quality data is not measured for use in determining the health of the wetland, rather it is collected to help understand underlying processes potentially affecting the productivity. There is no other biological or chemical data for wetland assimilation areas other than what is provided by the municipalities.

For a general discussion of wetland assimilation permit requirements and LDEQ's response to similar comments received during permit development, see response to comments for the City of Mandeville-Chinchuba Swamp and East Tchefuncte Marsh Wetland Assimilation Project Final Permit. (EDMS document 11325695m, EDMS link, https://edms.deq.louisiana.gov/app/doc/querydef.aspx)

COMMENT #9

Future IR development should include public workshops in each assessed watershed, make information more accessible to the public, and permit a longer period of time for public comment on the IR. Request that LDEQ issue the IR in a more accessible and readable format for the public. **(Healthy Gulf; Sierra Club;** PC**; LEAN)**

LDEQ RESPONSE TO COMMENT #9

Given the number of water quality subsegments assessed during each IR cycle, it is not feasible to hold public meeting in all assessed watersheds. LDEQ makes IR public notice documents accessible through the best available technology of the LDEQ website. It is uncertain how the documents can be made more accessible to the public. The IR comprises Volume 5 of LDEQ's WQMP and is therefore subject to specifications set forth in the WQMP. Volume 1 of the Continuing Planning Process (CPP), also a component of the WQMP, specifies that "The revised draft (of the WQMP, in this case the IR) is then sent out for public comment as specified in the certification procedures…" (Page 5 of the CPP). Page 7 of the CPP, Review/Certification/Approval Process" states "…WQMP updates will be announced as available for public review and comment in the state journal and in other newspapers located throughout the state as appropriate." Under the WQMP, the notice must last at least 30 days. All WQMP

documents are available on the LDEQ website at: https://www.deq.louisiana.gov/page/water-quality-management.

Regarding readability of the IR, LDEQ makes every effort to present information in the IR in an understandable manner for the general public. This is sometimes difficult due to the highly complex nature of the water quality monitoring, assessment, and management process. LDEQ is currently working on an IR mapping feature, similar to the department's Water Portal (https://waterdata.deq.louisiana.gov/) map and its Fish Consumption Advisory map (https://www.deq.louisiana.gov/page/fishing-consumption-and-swimming-advisories). This will help make IR assessment information more accessible to the general public in a mapping format. Requested comparisons between prior IRs and IRs which are under development are not required by state or federal regulations. They can be developed by the public using readily available historical IR documents found on the LDEQ website. As in the past, a list of impairments from the 2018 IR that were removed during development of the 2020 IR will be included in the final 2020 IR text. Such a list has now been included for several IR cycles. LDEQ will continue to meet all requirements for public noticing established by the CPP, WQMP, state and federal regulations.

COMMENT #10

Comparison of productivity at marsh and forested sites should be same species and age. Wetland assimilation areas use only one or two sites for comparison. How are reference sites representative of the area? What determines what is "near" in the permit. How many years are needed to determine significant change? There are "known" failures, including open water, in these sites that the assessment has not examined. **(Turner)**

LDEQ RESPONSE TO COMMENT #10

Sampling methods have been agreed upon between LDEQ and USEPA during development of the WQMP. The approved methods used to measure primary productivity are standard methods used frequently in literature and require sampling of all plant species in a given area (Cronk and Fennessy 2001).

References sites are selected by the permittee and approved by LDEQ during feasibility and baseline studies. They are chosen to represent the plant community present in the assimilation area. LDEQ's interpretation for assessment purposes was agreed upon between LDEQ and USEPA during development of the 2018 IR and utilizes five years of data for each assessment. Species diversity and percent whole cover are sampled in the fourth year of the permit and the data obtained from these analyses is used by WPD during their review of each assimilation wetland. The WPD also considers the entire length of data for each wetland, as opposed to the five years used during the IR process. Open water areas and tree dieback that may have been observed on Google Earth or by other means on specific days are not indicative of the overall, long-term health of the wetland area and may be misleading. Additionally, open water areas are considered in the updated percent whole cover method included in all permits renewed since 2017.

COMMENT #11

There are no signs posted warning of high coliforms or health risks for people going into the area. **(Turner)**

LDEQ RESPONSE TO COMMENT #11

The posting of warning signs at wetland assimilation areas, or any other water body, is not a consideration for IR assessments. Per LDEQ regulations, all discharges statewide are required to meet standards that are protective of human health and the environment prior to their exit from the outfall. All assimilation wetlands, except one, are required by their permits to meet the limits for primary contact recreation (200 and 400 colonies/100 mL for monthly and weekly averages, respectively), which is more stringent than the required limits in the regulations. (The one exception is for Terrebonne Parish Consolidated Government, Ashland wastewater facility, which has appealed its new permit.) Per LAC 33.XII.1109.J.3, wetlands approved for wastewater assimilation are only required to meet secondary contact recreation limits of 1,000 and 2,000 colonies/100 mL for monthly and weekly averages, respectively. Therefore, due to the more restrictive permit limits in place, no signage is necessary, as the discharge is not considered a danger. If there is an unexpected, unpermitted condition that occurs, the permittee is required to notify LDEQ as outlined in their permit (EDMS document 11325695, EDMS link, https://edms.deq.louisiana.gov/app/doc/querydef.aspx).

COMMENT #12

Cypress Island Coulee wetland (St. Martinville) does not have sufficient data for two of four years and should be reconsidered. **(Turner, EPA Region 6)**

LDEQ RESPONSE TO COMMENT #12

After discussion with LDEQ's WPD, it was determined the reference site for Breaux Bridge (LA060805_00), site 4586, and the reference sites for Broussard, sites 4615 and 4616, have historically been used as the reference sites for the St. Martinville (Cypress Island Coulee) wetland assimilation area (LA060806_00), as they are all located in the same geographic area. However, due to a change in consultant for Broussard, sites 4615 and 4616 were no longer available for use as reference sites for St. Martinville, the Permits Division recommended site 4586 continue to be used as the reference site for St. Martinville. The consultant for St. Martinville chose to select new references sites for use in the future. As more data for these new reference sites becomes available, they will be used for future IR assessments. Based on use of reference site 4586 the assessment of St. Martinville wetland assimilation area (LA060806_00) remains fully supported. Table 2 provides the new assessment summary.

Table 2.

Summary of Mean Percent Change in NPP for a five-year period for Near[1] and Reference Sites for wastewater (wetland) assimilation projects.

Cypress Island Coulee Wetland, St. Martinville (LA060806_00)				
Year	**Site**	**% Change Near Test Site**	**% Change Reference Sites (4586)**	**Assessment of Year-to-Year Support**
2014 to 2015	4591, 4592, 4595	35.0%	47.0%	Meet - Positive growth at test site
2015 to 2016	4591, 4592, 4595	-45.3%	-17.2%	Fail - Test percent loss >20 percentage points below reference site
2016 to 2017	4591, 4592, 4595	75.8%	-11.3%	Meet - Positive growth at test site
2017 to 2018	4591, 4592, 4595	-23.8%	-33.0%	Meet - Test percent loss at lower rate than reference site loss
				One annual failure over four years - Supports FWP

COMMENT #13

Wetland assimilation areas represent "dilution is the solution," not actual treatment. **(Turner)**

LDEQ RESPONSE TO COMMENT #13

Assimilation wetlands are not intended to be dilution or treatment of wastewater. Wastewater is fully treated prior to discharge. The receiving wetlands then assimilate nutrients in an effort to revitalize the wetland.

COMMENT #14

LDEQ should do a full review of the wetland assimilation areas for reauthorization, not this assessment. **(Turner)**

LDEQ RESPONSE TO COMMENT #14

It is not within the scope of the IR process to reauthorize any water quality discharge permit. Reauthorizations are handled by LDEQ's WPD. However, WPD does a full review of each wetland during its reauthorization. Additionally, annual reviews of each assimilation wetland have begun and can be found in EDMS.

COMMENT #15

General discussion of concern over extensive hydromodification in the Baton Rouge area and resulting degradation of water quality in area water bodies, along with continued impairment of many area water bodies. **(Sierra Club)**

LDEQ RESPONSE TO COMMENT #15

LDEQ shares the concerns of the Baton Rouge Group of the Sierra Club regarding hydromodification and water quality in the Baton Rouge area and across the state. The department is working closely with the Louisiana Watershed Initiative to develop and implement better watershed management practices to alleviate the damaging flood control practices of the past. As noted by the commenter, improved flood control practices will also help improve water quality in the future. Longstanding impairments of many water bodies in the area and the state point to the complex nature of water quality improvement efforts and the need for balancing economic growth with improved water quality conditions.

COMMENT #16

Sierra Club hopes that the Louisiana Watershed Initiative can help protect more natural flood habitats and improve water quality. **(Sierra Club)**

LDEQ RESPONSE TO COMMENT #16

LDEQ agrees with this comment.

COMMENT #17

Clean Water Act is vital for protecting a key area of concern for LEAN, specifically clean drinking water. Commenter noted that impairments to drinking water supply subsegments were given medium priority in § 303(d) priority ranking. **(LEAN)**

LDEQ RESPONSE TO COMMENT #17

LDEQ acknowledges the IR protocol for TMDL prioritization assigns drinking water supply impairments due to fecal coliform or organic compounds to medium priority. There are no drinking water supply use impairments for those two parameters. See also response to Comment 6 for impairment prioritizations.

COMMENT #18

Comments describe long-standing impairments for Calcasieu River and Ouachita River basins as well as for Devil's Swamp and Bayou Baton Rouge. Notes that most IR Category 5, 5RC, and 5-Alt impairments to these water bodies are low priority. **(LEAN)**

LDEQ RESPONSE TO COMMENT #18

LDEQ acknowledges the discussion of the long-standing impairments in the watersheds described by LEAN and the ranking of low priority assigned to most of them. See also response to Comment 6 for impairment prioritizations.

COMMENT #19

Commenter acknowledges the presence of past IRs on the LDEQ website and suggests providing a "clear summary of progress in each watershed" in the IR or another venue. **(LEAN)**

LDEQ RESPONSE TO COMMENT #19

Comparisons over time can be made by the public using available IR documents on the LDEQ website available at, https://www.deq.louisiana.gov/page/water-quality. See also response to Comment 9.

COMMENT #20

Recommends collaboration and consultation between Louisiana and Arkansas on water quality concerns shared by both states. **(LEAN)**

LDEQ RESPONSE TO COMMENT #20

In the past, LDEQ has worked with the Arkansas Department of Energy and Environment, Division of Environmental Quality (ADEQ) on cross border issues pertaining to the Ouachita and Red Rivers. Representatives of LDEQ and ADEQ sit on regional committees and are able to share information as needed.

COMMENT #21

Comments describe the condition of the lower Mississippi River along with various tributaries to the river. However, there were no direct questions or requests made by the commenter. **(Lower Mississippi Riverkeeper, a project of LEAN)**

LDEQ RESPONSE TO COMMENT #21

LDEQ acknowledges the discussion of the long-standing impairments in the watersheds described by the Lower Mississippi Riverkeeper and concurs with its main findings.

COMMENT #22

Clarify the continued use of fecal coliform indicator bacteria for freshwater subsegments in light of the 2012 USEPA Recreational Water Quality Criteria document. **(**PC**)**

LDEQ RESPONSE TO COMMENT #22

As was noted in the 2018 IR Response to Comments, for Water Quality Integrated Reporting purposes LDEQ is required to use water quality standards and criteria *as they exist at the time of report development*. Therefore, comments regarding changes to water quality criteria are not appropriate at this time and must be made during periodic standards revision occasions, for example the Triennial Review period.

COMMENT #23

PC cautions LDEQ in the broad application of Enterococcus as an indicator of fecal pollution for all areas, notably freshwaters. **(**PC**)**

LDEQ RESPONSE TO COMMENT #23

See response to Comment 22.

COMMENT #24

PC asks for LDEQ's comments on USEPA's 2019 Recommended Human Health Recreational Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin. **(**PC**)**

LDEQ RESPONSE TO COMMENT #24

LDEQ's Water Planning and Assessment Division (WPAD) is aware of the USEPA guidance and will consider them for future water quality criteria development with regard to harmful algal blooms. LDEQ has not yet developed state criteria for Microcystins or Cylindrospermopsin, therefore, the USEPA guidance cannot be used for IR assessments. See also response to Comment 22.

COMMENT #25

For the first time LDEQ provided assessments of wetland assimilation areas. **(PC)**

LDEQ RESPONSE TO COMMENT #25

LDEQ also provided assessments of wetland assimilation areas as part of its 2018 IR.

COMMENT #26

The 2020 IR only notes one impairment of wetland assimilation areas. That being the South Slough Wetland, LA040604_001. **(PC)**

LDEQ RESPONSE TO COMMENT #26

This is correct. All other wetland assimilation areas met the established assessment requirements for full support of the fish and wildlife propagation use based on vegetative productivity. See also response to Comment 8.

COMMENT #27

LDEQ's Quality Assurance Project Plan for the Ambient Water Quality Monitoring Network and Table 2 of the 2020 IR Rationale notes that assessments for fish and wildlife propagation are made using measurements for dissolved oxygen, temperature, pH, chlorides, sulfate, total dissolved solid, and turbidity. **(PC)**

LDEQ RESPONSE TO COMMENT #27

This is correct; however, LAC 33:IX.1123, Table 3 indicates wetland assimilation areas do not have numerical criteria for the parameters listed by the commenter. Rather, there are footnotes (5, 17, 18, and 23) referring to the vegetative productivity requirements use for assessment of the areas. These were described in detail starting on page 17 of the 2020 IR Rationale. LDEQ WPAD and WPD also takes into account regulations found at LAC 33:IX.1109.J.3 and 4 for wetlands.

COMMENT #28

Commenter questions LDEQ's reasoning that a biomass marker alone is sufficient for determining the quality of water of a wetland, as the litterfall or biomass measure does not ascertain if there is enough dissolved oxygen to support benthic invertebrates, fish, or bivalves. **(PC)**

LDEQ RESPONSE TO COMMENT #28

Biomass markers are not used to determine the water quality of a wetland and water quality data is not used in determining the health of the wetland. Water quality data is collected to help understand underlying processes potentially affecting the productivity. As wetlands are naturally dystrophic waterbodies and per LAC.33.IX.1109.J.4.a, "a numerical dissolved oxygen criterion is not necessary to protect the beneficial use of fish and wildlife propagation." See also responses to comments 8 and 27.

COMMENT #29

LDEQ requires facilities discharging wastewater for wetland assimilation to sample for metals, nutrients, and other water quality metrics in the annual wetland monitoring reports. PC asks the department to consider evaluating this data in the assessment of wetland subsegments. **(PC)**

LDEQ RESPONSE TO COMMENT #29

The water quality monitoring parameters listed by PC are considered by the LDEQ WPD and ED as part of a facility's water discharge permit requirements and during WPD's annual review. Annual reviews are available in EDMS under each facility's AI. See also response to Comment 8.

COMMENT #30

No quality assurance discussion is given in the wastewater (wetland) assimilation section of the report to compliance or completeness of third-party information. The department should provide additional metrics to support use of third-party datasets. **(PC)**

LDEQ RESPONSE TO COMMENT #30

Annual reports from wetland assimilation area facilities are evaluated for completeness and accuracy by LDEQ's WPD. The WPAD is responsible for producing the IR. During review of the annual reports the facility is notified of serious deficiencies, if any, and asked to prepare corrective actions. While LDEQ must take into account the accuracy of all data and information used in the IR, it is not required to document the Quality Assurance/Quality Control (QA/QC) procedures of third-party data providers in the IR. LDEQ does not require any data submitted via a third-part for any part of any water permit application or DMR to submit QA/QC documentation. All labs are required to be certified by the Louisiana Environmental Laboratory Accreditation Program for water quality data and follow the required methods in their permit. See also response to Comment 8.

COMMENT #31

Based on comments previously addressed in this response to comments, PC suggests revising the report (2020 IR) to include a new designated water body use definition that is specific to the wastewater (wetland) assimilation practice, and the IR should not be finalized with wetland subsegments utilized for wastewater (wetland) assimilation in a manner consistent with fish and wildlife propagation metrics and definitions as other waters of the state. **(PC)**

LDEQ RESPONSE TO COMMENT #31

As was noted in the 2018 IR Response to Comments and in Comment 22 above, Water Quality Integrated Reporting requires the use of water quality standards and criteria *as they exist at the time of report development*. Therefore, comments regarding changes to water quality criteria or designated uses are not appropriate at this time and must be made during periodic standards revision occasions, for example the Triennial Review period.

COMMENT #32

No glossary in the 2020 IR Rationale so unable to determine difference between designated uses of fish and wildlife propagation use and limited aquatic life use. **(Mr. Mike Tritico-RESTORE)**

LDEQ RESPONSE TO COMMENT #32

The limited aquatic life designated use is a subset of the fish and wildlife designated use. It is applied to water bodies having habitat that is uniform in structure and morphology, with most regionally expected aquatic species absent, and an imbalanced trophic structure. Definitions of all designated uses can be found in LAC 33:IX.1111.A. The regulatory reference is provided in the full text of the 2020 IR. LDEQ will consider adding the reference to future IR Rationales.

COMMENT #33

Subsistence fishing and baptisms should be added as designated uses in Louisiana regulations. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #33

An increased level of fish consumption by Louisianans is factored into the protections put in place by the fish and wildlife propagation use. LDEQ uses a fish consumption rate higher than what is required by USEPA guidance. Baptisms, while not explicitly included in the definition of primary or secondary contact recreation, would be considered incidental water contact under the secondary contact recreation designated use. Thus it is protected by the designated uses criteria.

COMMENT #34

LDEQ should encourage state legislature and the governor to provide funding for LDEQ activities. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #34

The state legislature does from time to time provide limited funding for specific activities not otherwise funded by permit fees and enforcement penalties. While a large percentage of LDEQ's funding comes from fees, penalties and the Environmental Trust Fund, nearly all water quality monitoring and assessment work is funded by federal CWA grants awarded by the USEPA. It is not within the scope of the IR process to request funding for the department.

COMMENT #35

Special attention should be given to the possibility that new nonpoint sources of runoff into subsegment LA020101, including Bayou Chevreuil, are causing the trend toward eutrophication. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #35

LDEQ is aware of the extensive agricultural areas surrounding this subsegment. A revised TMDL was developed in 2004 to address biochemical oxygen-demanding substance loading in the area.

COMMENT #36

Subsegment LA090501_00 (Bogue Chitto River) is an outstanding natural resource water. LDEQ and its partners should work to reverse the turbidity problems in the water body. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #36

A turbidity TMDL for subsegment LA090501_00 was developed in 2008. Water discharge permitting of sand and gravel operations, along with possible Nonpoint Source Program activities, are expected to reduce turbidity loading in the river.

COMMENT #37

Subsegments LA030201_00 (Calcasieu River-Marsh Bayou to saltwater barrier), LA030306_00 (Bayou Verdine), LA030305_00 ((Contraband Bayou) and LA030702_00 (English Bayou) along with other Calcasieu River subsegments are impaired for turbidity. LDEQ should require construction projects, forestry and agriculture to stop muddy runoff. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #37

A turbidity TMDL for LA030702_00 was developed in 2002. While no other TMDLs have been developed on the other listed subsegments, LDEQ's Nonpoint Source Program continues to work with the Louisiana State University AgCenter and the Louisiana Department of Agriculture and Forestry to develop and promote best management practices for farmers and foresters to reduce turbidity loading statewide. In addition, construction projects over one acre require stormwater permits to reduce the amount of turbid water released from the site.

COMMENT #38

The Mermentau River Basin had the highest rate per acre of pesticide and herbicide application by agricultural interests. The 2020 IR indicates the continued presence of Fipronil and Carbofuran in the region. LDEQ should investigate if remediation is possible. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #38

The widespread assessment of impairment due to Fipronil and Carbofuran in the Mermentau River Basin is believed to be a legacy of past agricultural practices in the basin. LDEQ is seeking funding for a new study to test water bodies reported as impaired by Fipronil and Carbofuran in order to determine if the impairments are still present. Due to reductions in, or in some cases elimination of, the use of Fipronil, it is hoped that concentrations are now below acceptable risk levels.

COMMENT #39

There are nine subsegments impaired for mercury in the Calcasieu River Basin. Regardless of the source of the mercury, the state should initiate efforts to remediate the problem. This could possibly include some type of mechanical-chemical procedure or sediment extraction device. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #39

LDEQ continues to work toward the reduction of sources of mercury in the environment through, where applicable, water and air permitting actions, as well as through site specific remediation actions where such sources are found. The proposed sediment remediation activities to remove mercury from water bodies with fish consumption advisories are not feasible. Concentrations of mercury in sediment under normal ambient conditions, i.e., not directly affected by a known point source or spill of mercury, are generally well below human or aquatic life risk levels. Therefore, it is unlikely that any kind of remediation activity would recover enough mercury to warrant the aquatic habitat damage caused directly by the activity. Concentrations in fish are due to the effect of bioaccumulation of mercury through the food chain under specific conditions generally found in swampy, low pH water bodies.

COMMENT #40

LDEQ accepts the contention by parties responsible for cleanup of Bayou Olsen and Carlyss pit that natural sedimentation will suppress the release of contaminants. It is time for a thorough investigation of the pattern of halogenated hydrocarbon contamination of sediments in Moss Lake, in particular how it is impacted by Bayou Olsen and the Carlyss pit. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #40

Remediation actions are not within the scope of the IR assessment process. As was noted in the 2018 IR, in the section on IR Category 4b water bodies (LDEQ 2018), and in the full text of the 2020 IR, remediation and monitoring efforts at Bayou Olsen and Carlyss pit are ongoing.

COMMENT #41

Additional monitoring, especially bore sampling is required around the BFI-CECO site near Willow Springs and Little River. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #41

Remediation actions are not within the scope of the IR assessment process. LDEQ's Remediation Division continues to work in the area, including efforts to prevent migration of contaminants and groundwater modeling to determine affected areas.

COMMENT #42

A proper removal of fish consumption advisories in the Calcasieu estuary can only be done through true remediation efforts along Bayou d'Inde and other similar areas of the estuary. Also mentioned Carlyss Pit, PPG South Terminal waste field, and old Bollinger site as examples of legacy contamination areas. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #42

Remediation actions are not within the scope of the IR assessment process. LDEQ's Remediation Division continues to work with responsible parties in the area.

COMMENT #43

If people think that thermal curtains are not a problem in the Calcasieu Ecosystem, then get industrial heat dumpers to fund the Beneficial Environmental Project (BEP) for study of thermal impacts in the Calcasieu and estuary let us see the results. Discussed effects of thermal currents on biota in the Calcasieu estuary. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #43

Water discharge permitting, which governs thermal impacts of the discharges, and BEP studies are not within the scope of the IR assessment process. Thermal discharges from facilities along the Calcasieu River and Ship Channel, as well as elsewhere in the state, are regulated by LDEQ's WPD.

COMMENT #44

Fecal coliform impairments to Constance, Long, Dung, Little Florida, Martin, Gulf Breeze and Holly Beaches are caused by cattle not waterfowl. LDEQ could use its authority to round up and rein in the herds to solve the problem. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #44

Impairment is actually reported as Enterococcus, not fecal coliform. In either case, the sources are likely to be similar. LDEQ does not have the authority to require cattle ranchers and farmers in the region to remove cattle from the marshes.

COMMENT #45

Comment notes fecal and Enterococcus impairments to many Calcasieu River Basin subsegments. Encourages the use of federal programs to fund improvement of home septic systems and small municipal or private sewage systems. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #45

LDEQ's Nonpoint Source program (https://www.deq.louisiana.gov/page/nonpoint-source) includes information to educate and assist homeowners with home sewage issues. Louisiana's Clean Water State Revolving Loan Fund provides low interest loans to municipalities for new sewage systems or improvement of existing systems, as well as other water quality improvement projects (https://www.deq.louisiana.gov/page/clean-water-state-revolving-fund).

COMMENT #46

Expressed concern over low DO and fecal coliform problems in subsegment LA030305_00 (Contraband Bayou) and other water bodies in the Lake Charles area. LDEQ should get a grant to do education in South Lake Charles to prod the citizens to get the stream fixed. Tightening the city sewage discharge permit would also help. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #46

Public education of local citizens regarding the ongoing problems of sewage and anthropogenic biological oxygen demanding substances in Contraband Bayou is a good idea. LDEQ has several public education documents available on its website at: https://www.deq.louisiana.gov/resources/category/nonpoint-source?y=1900&keyword=&pn=1. Local educational programs as mentioned by the commenter typically start with local groups or municipalities. LDEQ water discharge permit requirements are not within the scope of the IR process.

COMMENT #47

LA030201_00 (Calcasieu River and Ship Channel from saltwater barrier to Moss Lake), LA030303_00 (Prien Lake), LA030304_00 (Moss Lake), LA030401_00 (Calcasieu River from Moss Lake to Gulf of Mexico, LA030402_00 (Calcasieu Lake) all having trouble meeting designated uses for fish and wildlife propagation. Provided letter to LDWF describing what the commenter believes are the problems with fisheries on the river. Stated, do not "aid and abet" LDWFs mistaken attempts to relieve entities of their responsibility for interfering with the propagation of wildlife and fish. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #47

Most of the problems outlined by the commenter in his letter to LDWF are outside the scope of the IR process. The reported "thermal shocks" or "thermal barriers" to fishes in the Calcasieu estuary are addressed, where necessary, in part by LDEQ's water discharge permits as temperature limits on discharges. Chemical pollutant concerns expressed in the LDWF letter were discussed in Comments 40 and 42.

COMMENT #48

Commenter thanks LDEQ for its efforts to protect Louisiana's environment and natural resources. **(RESTORE)**

LDEQ RESPONSE TO COMMENT #48

LDEQ appreciates the comment.

COMMENT #49

During final review of the draft 2020 IR, after resolving ongoing data review issues with a dataset provided by PC for fecal coliform and enterococcus, LDEQ determined that the dataset could be used for IR assessment. Therefore, fecal coliform assessments for one subsegment (LA040804_00-

Bogue Falaya River) and enterococci assessments for two subsegments (LA041001_00-Lake Pontchartrain west of US-11 bridge and LA041301_00-Bayou St. John) required changing from fully supported to not supported (Table 3). All changes are reflected in Table 3.2.6 of the 2020 IR text, ATTAINS, the Appendix A spreadsheet containing all assessments, and finally in the Appendix G spreadsheet for the § 303(d) List. All three new impairments were assigned to IRC 5.

Table 3.

Revisions to selected subsegment assessments for fecal coliform and enterococci based on Pontchartrain Conservancy data.

Subsegment	Subsegment Name	Pontchartrain Conservancy Site	Original LDEQ PCR Enterococci Assessment	Revised Enterococci PCR Assessment with PC Data	Original LDEQ PCR Fecal Assessment	Revised Fecal PCR Assessment with PC Data	Original LDEQ Fecal Coliform SCR Assessment	Revised Fecal SCR Assessment with PC Data
LA040803_00	Tchefuncte River-From La. Highway 22 to Lake Pontchartrain	7	Not Supported	No change-Not Supported	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA040804_00	Bogue Falaya River-From headwaters to Tchefuncte River	6[1]	NA-Fecal Criteria Only	NA-Fecal Criteria Only	Fully Supported	**Change to Impaired[1]**	Fully Supported	Fully Supported
LA040804_00	Bogue Falaya River-From headwaters to Tchefuncte River	14[1]	NA-Fecal Criteria Only	NA-Fecal Criteria Only	Fully Supported	**Change to Impaired[1]**	Fully Supported	Fully Supported
LA040904_00	Bayou Cane-From CDM Ecoregion boundary to Lake Pontchartrain (Bayou Castine sample site)	8	Not Supported	No change-Not Supported	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	1[1]	Fully Supported	**Change to Impaired[1]**	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	2[1]	Fully Supported	**Change to Impaired[1]**	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	3[1]	Fully Supported	**Change to Impaired[1]**	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported

Table 3.

Revisions to selected subsegment assessments for fecal coliform and enterococci based on Pontchartrain Conservancy data.

Subsegment	Subsegment Name	Pontchartrain Conservancy Site	Original LDEQ PCR Enterococci Assessment	Revised Enterococci PCR Assessment with PC Data	Original LDEQ PCR Fecal Assessment	Revised Fecal PCR Assessment with PC Data	Original LDEQ Fecal Coliform SCR Assessment	Revised Fecal SCR Assessment with PC Data
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	4[1]	Fully Supported	**Change to Impaired**[1]	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	9[1]	Fully Supported	**Change to Impaired**[1]	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	10[1]	Fully Supported	**Change to Impaired**[1]	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	12[1]	Fully Supported	**Change to Impaired**[1]	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041001_00	Lake Pontchartrain-West of US-11 bridge (multiple sites)	13[1]	Fully Supported	**Change to Impaired**[1]	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported
LA041301_00	Bayou St. John	11	Fully Supported	**Change to Impaired**	NA-Enterococci Criteria Only	NA-Enterococci Criteria Only	Fully Supported	Fully Supported

1. Multiple sites on one subsegment.

COMMENT #50

During USEPA's preliminary review of the 2020 IR it identified two errors in LDEQ's original reporting for subsegment LA040802_00 (Ponchitolawa Creek). Also during USEPA review, LDEQ noted that a DO TMDL had not been correctly assigned to LA040916_00 (Bayou Paquet).

1. In the public noticed version of the 2020 IR turbidity was incorrectly reported as not impaired due to a mistake with the turbidity criterion used for the assessment. Ponchitolawa Creek currently has a turbidity criterion of 25 Nephelometric Turbidity Units (NTU); however, the criterion assigned in the Louisiana Environmental Assessment Utility (LEAU) database was 50 NTU. When the correct criterion of 25 NTU was used for the assessment the designated uses of fish and wildlife propagation and outstanding natural resource changed to impaired. Turbidity was added as an impairment to both uses in ATTAINS and subsequent 2020 IR reporting spreadsheets. The IR category is 5.
2. A biological oxygen demand (BOD) TMDL developed in 2009 for subsegments LA040802_00 and LA040803_00, Lower Tchefuncte River, was not assigned to the DO impairment on new subsegment LA040802_00, Ponchitolawa Creek. A new subsegment for Ponchitolawa Creek was separated from the original Tchefuncte River subsegment LA040802_00 but given the same subsegment number. Upon closer review of the BOD TMDL it was determined that the TMDL also included Ponchitolawa Creek in its surveys, load allocations and wasteload allocations. As a result, the DO impairment IR category for Ponchitolawa Creek was changed from 5 to 4a, TMDL completed. This correction was made in ATTAINS and in subsequent 2020 IR reporting spreadsheets.
3. A BOD TMDL developed in 2011 for subsegments LA040905_00, LA040906_00, LA040907_00, and LA040908_00 (Bayou Bonfouca and Bayou Liberty) was not assigned to the DO impairment on new subsegment LA040916_00, Bayou Paquet. A new subsegment for Bayou Paquet was separated from the original Bayou Liberty subsegment and given a different subsegment number. Upon closer review of the BOD TMDL it was determined that the TMDL also included Bayou Paquet in its surveys, load allocations and wasteload allocations. As a result, the DO impairment IR category for Bayou Paquet was changed from 5 to 4a, TMDL completed. This correction was made in ATTAINS and in subsequent 2020 IR reporting spreadsheets.

Literature Cited

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