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## State of Louisiana

## DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF THE SECRETARY

August 24, 2018

Honorable Senator Sharon Hewitt Chair, Lower Pearl River Basin Task Force Rankin-Hinds Pearl River Flood and Drainage Control District P.O. Box 320790 Flowood, MS 39232

RE:

Review of Integrated Draft Feasibility Study and Environmental Impact Statement Pearl River Basin Federal Flood Risk Management Project, Rankin and Hinds Counties, MS, a.k.a. "One Lake Project"

Dear Senator Sharon Hewitt,

The Louisiana Department of Environmental Quality (LDEQ), Office of Environmental Assessment, Office of Environmental Compliance and Office of Environmental Services reviewed the Integrated Draft Feasibility Study and Environmental Impact Statement (DFEIS) for the Pearl River Basin Federal Flood Risk Management Project, herein referred to as One Lake Project. LDEQ assessed potential impacts to the Lower Pearl River Basin within Louisiana based upon the DFEIS and local, historical knowledge of the Lower Pearl River Basin. LDEQ assessed impacts solely within the regulatory jurisdiction of the LDEQ, which includes Water, Air and Waste programs and has the following comments based upon the aforementioned project.

As required by the National Environmental Policy Act (NEPA), the Rankin-Hinds Pearl River Flood and Drainage Control District prepared a DFEIS. The DFEIS addressed the impact to the Upper Pearl River Basin but falls short in consideration to the potential impacts to the water quantity and the water quality of the Lower Pearl River Basin within Louisiana. To provide the impact of the One Lake Project on the Lower Pearl River Basin, a thorough environmental impact assessment on essential additional information is needed, specifically:

Additional Information is requested, describing how flow will be managed to prevent and/or mitigate impacts to water quantity in the Lower Pearl River during project construction. The Study area, as described on page 20 of the DFEIS, does not specifically include the downstream reaches of the Pearl River in Louisiana. Downstream flows are only briefly discussed in Appendix C — Water Quantity Assessment utilizing existing data from the Ross Barnett Reservoir. The Downstream Impacts Analysis Fact Sheet located on the Rankin-Hinds website states assumptions that the project, "once constructed", would not impact the water quantity and was based solely on minimum flow requirements from the Ross Barnett Reservoir and evaporation estimates. The

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Fact Sheet addresses only *post-project* construction impacts to water quantity. The DFEIS does not address potential impacts to water quantity *during construction* of Alternative C, the Tentatively Selected Plan (TSP).

- Additional Information is requested, describing and evaluating the water quality in the Lower Pearl River during project construction. The DFEIS does not adequately address potential impacts to water quality in the portion of the Lower Pearl River Basin within Louisiana, and within the project area, during the construction of the TSP. Page 1 of the DFEIS, Appendix D: Environmental Water Quality states: "In this report, historical and existing water quality conditions are described and evaluated for the Pearl River and its tributaries from the Ross Barnett Reservoir dam to approximately mile 280 on the Pearl River, that is, the Study Area (see Figure 1-1 in the FS/EIS)." And "Taking into consideration each of the proposed alternatives, water quality modeling was used to project water quality conditions of the Pearl River near Jackson<sup>1</sup>."
- Consideration of minimum low flows must be given to major downstream facilities which discharge to and/or utilize the lower Pearl River as a water source. Two major facilities, which discharge storm water and waste water into the lower Pearl River near Bogalusa, Louisiana, may potentially be impacted as a result of reduced flows. Their LDEQ issued water quality permit limitations are based upon calculated critical low flow of 1,260 cubic feet per second (cfs). Flow below this minimum rate could impose much stricter permit limitations upon the quantity and quality of their discharge. Page 78 of the DFEIS, Appendix C: Engineering states "the Ross Barnett Reservoir has not reduced the mean annual volume of water received by the Lower Pearl River Basin." An analysis of temporally varying critical low flows (the 7Q10, for example) and the trends before and after reservoir construction, rather than mean annual flow, would be more relevant to LDEQ for permitting. The DFEIS discusses the purpose of the installation of a 12'X12' gate within the relocated weir to maintain minimum low flows pursuant to permitted requirements of the J.H. Fewell Water Treatment Plant near Jackson, Mississippi but no such consideration was provided for downstream facilities.
- Additional information describing how the potential channel stability and sediment issues will be addressed in the project area during and post construction. This description should also address channel hydraulics and sediment transport during seasonal periods of high flow and downstream impacts. The DFEIS indicates on page 117, Section 3.6.3 Alternative B (Levee Plan) additional floodwalls and conveyance improvements would be constructed. However, there will still be a "risk of overtopping or failure in levee sections during extreme events". Additionally, the DFEIS states in Section 4.5.2.4 Channel Stability (Erosion and Sedimentation), page 177, Alternative B, direct and indirect impacts: "Structural measures such as levees and floodwalls could have some impact on channel stability. The clearing and conveyance improvements from RM 293.5 to RM 302.0 could increase overbank erosion and accelerate bank erosion in this reach due to removal of vegetation. In addition, with the construction of these features, velocities of flood flows will increase, increasing the possibility of erosion." According to the DFEIS on page 121, Section 3.6.4 Alternative C - TSP (Channel Improvement/Weir/Levee Plan), 2,500 acres will be disturbed by "Clearing and Grubbing" and 25 million cubic yards by "Excavation/Levee". The time frame during which "Clearing and Grubbing" and "Excavation/Levee" activities would occur is not specified. However, it is reasonable to assume the timetable for activities will occur over

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months to years. Most of these activities will occur within the flood plain of the Pearl River. The DFEIS states in Section 4.5.2.4 Channel Stability (Erosion and Sedimentation), page 177, Alternative C - TSP, Direct and Indirect Impacts: "Due to channel excavation and change in potential hydraulic parameters, a more detailed analysis was performed for this alternative. Structural measures such as levees, channel excavation, and construction of an in-channel weir were analyzed to preliminarily determine impacts of channel stability upstream and downstream of the Project Area. Based on the results of this preliminary assessment, it is believed there may be some potential channel stability and sediment issues that will have to be addressed in the project area."

- Further clarification of the meaning of the term "flowline" and the related activity necessary to relocate these "flowlines" will be required to fully assess the potential effect of this activity. Section 3.6.4 Alternative C TSP (Channel Improvement/Weir/Levee Plan) also mentions "lowering flowlines through the reach." The term "flowline" is used in oil and gas exploration activities and indicates pipe lines which carry crude oil, gas, and produced water from a well to a production facility. If released or spilled, crude oil and produced water can cause significant negative environmental impacts. However, the DFEIS does not identity what is in the flowlines, how the flowlines will be lowered to prevent releases or spills, or any direct or indirect impacts from "lowering flowlines".
- The current DFEIS does not provide sufficient details on how the three HTRW sites will be mitigated and does not address the potential short term and long term impacts to water quality within the project area and in the lower Pearl River due to releases from the above HTRW sites during and after the construction of Alternative C - TSP. Section 4.3.4 Historical Sites Within the Project Study Area, on pages 139 – 141, identifies three sites within the project area: The Gulf States Creosote Company Site; the unpermitted Lefleur's Landing Site; and the unpermitted Gallatin Street Landfill Site. These sites are all identified as Hazardous, Toxic and Radiological Waste (HTRW) sites in Section 4.5.14, on pages 221 - 223. The DFEIS identified both inorganic and organic hazardous substances at the Gulf States Creosote Company Site. Regarding this site, the DFEIS states: "The site, or portions thereof, may require avoidance, remediation, or some other mitigating measures." The Lefleur's Landing Site was concluded to be "a source of waste residuals and chemicals entering the Pearl River." Regarding this site, the DFEIS states: "Further investigations would be necessary to determine potential leaching of landfill waste chemicals to the groundwater and any movement of the groundwater into the proposed channel improvement." Leachate containing elevated levels of cadmium, lead, and nickel were documented to be in groundwater associated with the Gallatin Street Landfill Site. Regarding this site, the DFEIS states: "The proposed channel improvement excavation area would also bisect the unpermitted Gallatin Street Landfill Site; therefore, excavation and removal of approximately half of the landfill site would be required to construct the proposed channel improvement. This excavated material would then be incorporated into the current remaining landfill area to further elevate the area, cap the area, and provide bank stabilization. Further investigations may be required to determine potential leaching of landfill waste chemicals to the groundwater and movement of the groundwater into the proposed channel improvement area prior to the initiation of excavation activities at this location." Further complicating the risk to the lower Pearl

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River is the fact that the three previously mentioned HTRW sites will be inundated during seasonal high river flows.

Based upon the aforementioned information, LDEQ respectfully requests that more information be provided to clearly understand this project's potential impact upon the Lower Pearl River Basin in Louisiana. Without this additional information, the LDEQ cannot support this proposed project.

If you have any questions regarding this matter, please feel free to contact Jeff J. Dauzat, Administrator, Emergency and Radiological Services Division at (225) 219-2966 or by email at <a href="mailto:Jeff.Dauzat@la.gov">Jeff.Dauzat@la.gov</a>.

Sincerely,

Dr. Chuck Carr Brown

Secretary

Louisiana Dept. of Environmental Quality