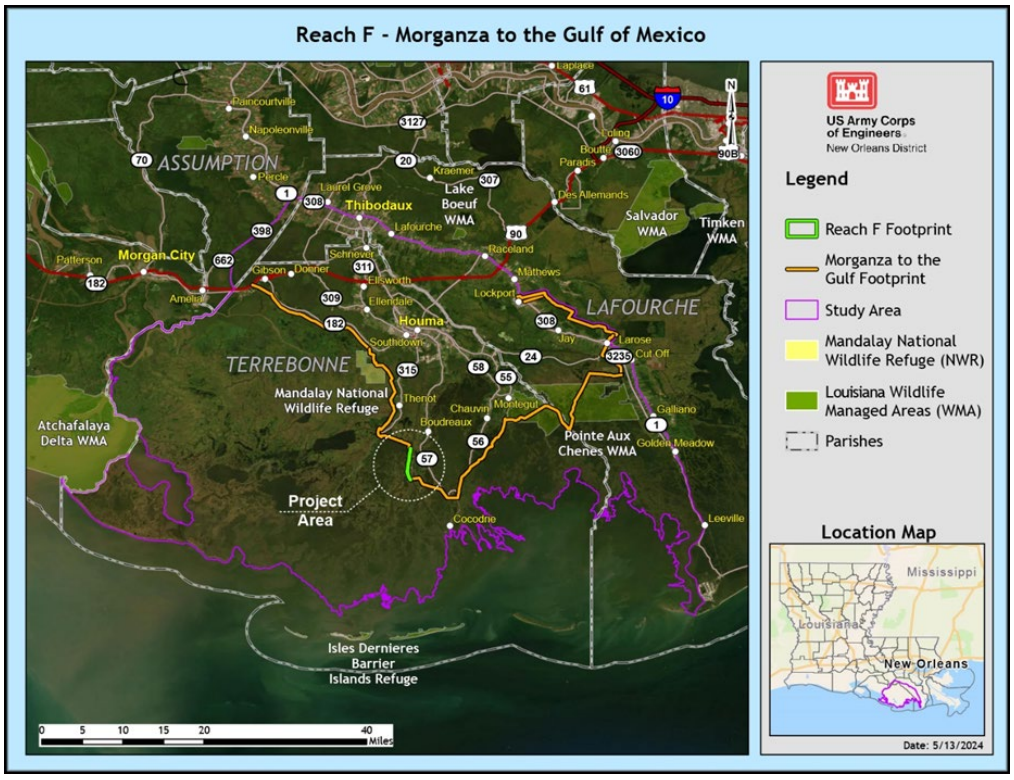
Reach F, Hurricane and Storm Risk Reduction Project Morganza to the Gulf, Terrebonne Parish, Louisiana



Appendix I: Water Quality

July 2026

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Water Quality Details

Section 305(b) of the Clean Water Act (CWA) requires each state to monitor and report on surface and groundwater quality, which the Environmental Protection Agency (EPA) synthesizes into a report to Congress. The Louisiana Department of Environmental Quality (LDEQ) produces a Section 305 (b) and Section 303(d) Water Quality Report every two years that provides a status report on the quality of Louisiana's surface water, and the methodology of data collection for surface water. It also identifies impaired water bodies. Section 303(d) of the CWA requires states to identify waterbodies that are impaired or in danger of becoming impaired due to exceedances of federally approved water quality standards. The State of Louisiana and the EPA have established surface water quality standards to assess ambient water quality conditions and to establish a priority ranking for such waters ((Louisiana Administrative Code (LAC), Title 33:IX.1101 et seq. (LAC 2021)). Most recently, the LDEQ released the 2024 Louisiana Water Quality Inventory: Integrated Report.

The LDEQ divides waterbodies into classifications for water quality assessment purposes. Eight designated uses were established for surface waters in Louisiana: Primary Contact Recreation (swimming), Secondary Contact Recreation (boating), Fish and Wildlife Propagation (fishing), Drinking Water Supply, Outstanding Natural Resource, Oyster Propagation, Agriculture, Limited Aquatic Life and Wildlife.
Once the waterbodies are classified for designed uses, the waterbodies are then labeled as either Fully Supporting - the assessed water body is fully supporting the designated use, Not Supporting - the assessed water body is not fully supporting the designated use, Insufficient data - there is insufficient data to make a reliable determination if the water body supports the designated use, No Data Collected - data was not collected on the assessed water body to make a determination if the water body supports the designated use, Not a Use - the designated use on the map does not apply to that assessed water body.

This labeling helps classify which of the nine Integrated Report Category (IRC) the waterbodies should be labeled as. The categories are labeled in the below table.

Table 1. Integrated Report Category Labels

IR Category	IR Category Description
IRC 1	Specific Water body Impairment Combination (WIC) cited on a previous §303(d) list is now attaining all uses and standards. Also used for water bodies that are fully supporting all designated uses.

IRC 2	Water body is meeting some uses and standards but there is insufficient data to determine if uses and standards associated with the specific WIC cited are being attained.
IRC 3	There is insufficient data to determine if uses and standards associated with the specific WIC cited are being attained.
IRC 4a	WIC exists and a TMDL has been completed for the specific WIC cited.
IRC 4b	WIC exists and control measures other than a TMDL are expected to result in attainment of designated uses associated with the specific WIC cited.
IRC 4c	WIC exists and a pollutant (anthropogenic source) does not cause the specific WIC cited.
IRC 5	WIC exists for one or more uses and a TMDL is required for the specific WIC cited. IRC 5 and its subcategories of IRC 5RC and IRC 5-Alt represent Louisiana's §303(d) list.
IRC 5RC (Revise Criteria)	WIC exists for one or more uses and a TMDL is required for the specific WIC cited; LDEQ would investigate revising criteria due to the possibility that natural conditions may be the source of the water quality criteria impairments. IRC 5RC WICs are on Louisiana's §303(d) list.
IRC 5-Alt (Alternative)	WIC exists for one or more uses and a TMDL is required for the specific WIC cited; however, based on the §303(d) long-term vision protocol an alternative approach is expected to achieve water quality goals. IRC 5-Alt WICs are on Louisiana's §303(d) list.

Within Louisiana, there are 12 watershed basins that are categorized by LDEQ: Atchafalaya River Basin, Barataria Basin, Calcasieu River Basin, Lake Pontchartrain Basin, Mermentau River Basin, Vermilion-Teche Basin, Mississippi River Basin, Ouachita River Basin, Pearl River Basin, Red River Basin, Sabine River Basin, Terrebonne Basin. The figure below outlines the 12 watershed basins within Louisiana.

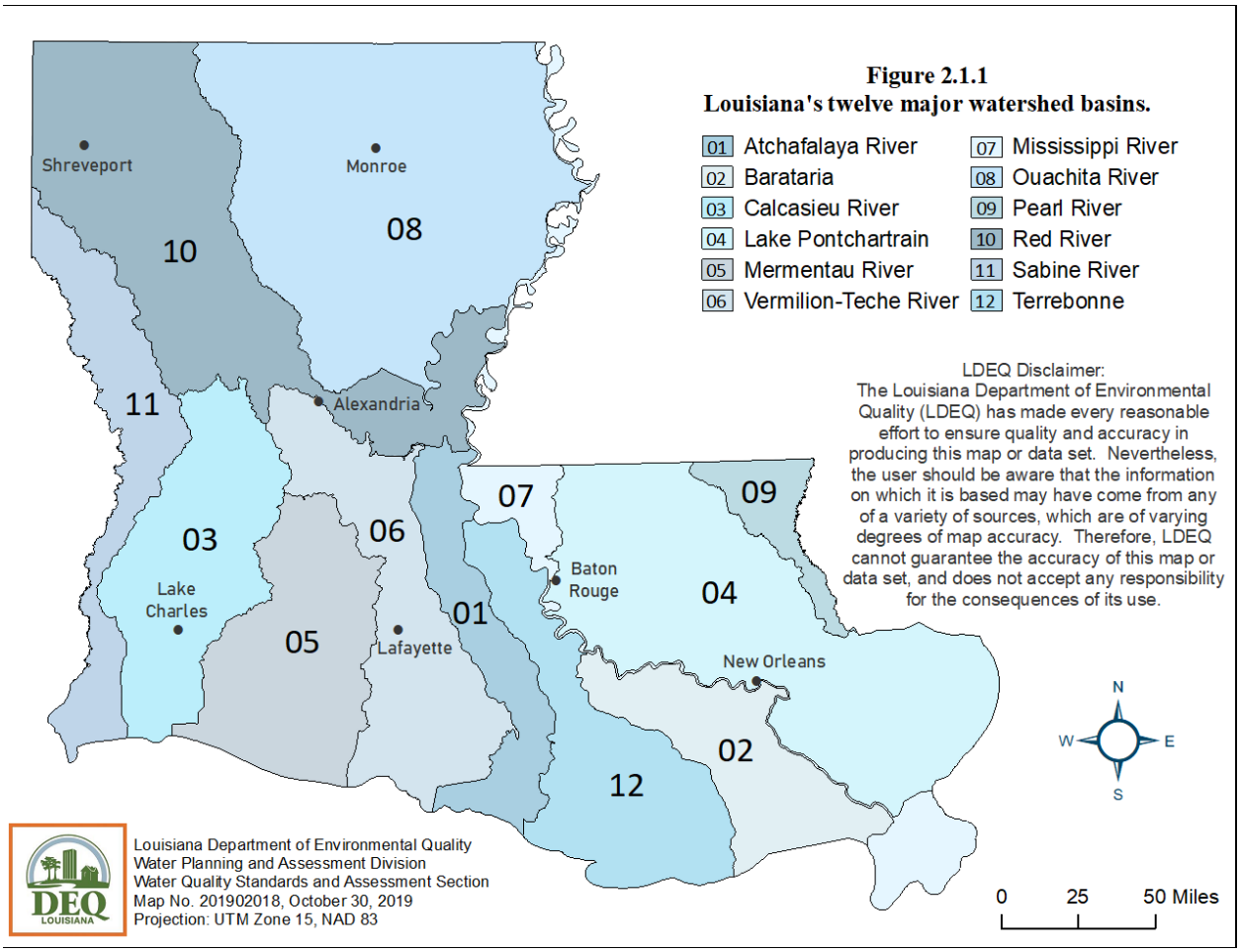

Figure 1. Louisiana's 12 major watershed basins

Project Area - The project area focuses on one watershed basin: Terrebonne drainage basin (12 in the figure above) and is labeled as one 4-digit Hydrologic Unit: Lower Mississippi-0809. According to LDEQ, the Terrebonne basin is located within southern Louisiana and is located West of the Mississippi River. The basin can be broken into an 8-digit Hydrologic Units; West Central Louisiana Coastal-08090302, East Central-08090301, Eastern Louisiana Coastal-08090203.

The project area consists of one parish within Louisiana: Terrebonne Parish. Within this parish, there are six 12-digit Hydrologic Units: Houma Navigation Canal-Bayou Grand Caillou- 080903020605, Bayou Sale-Sweetwater Pond- 080903020604, Northwest Jack Williams Bay-080902030605, Brusie Lake-Frontal Little Lake-080903010407, Lake Tambour-080903020807, Bayou Grand Caillou-Frontal Caillou Bay-080903020608.

The 2024 Louisiana Water Quality Integrated Report, LDEQ outlines subsegments that are within the project area: LA120508_00- Houma Navigation Canal-From Bayou Pelton to 1 mile south of Bayou Grand Caillou (Estuarine), LA120701_00- Bayou Grand Caillou-From Houma Navigation Canal to Caillou Bay (Estuarine), LA042203_00-Bay Boudreau, LA042003_00-Bayou La Loutre-From MRGO to Eloi Bay (Estuarine),

LA020902_00-Little Lake (Estuarine), LA120704_00-Bayou Terrebonne-From Humble Canal to Lake Barre (Estuarine), LA120706_00-Bayou Blue-From Bully Camp Canal to Lake Raccourci (Estuarine), LA120701_00-Bayou Grand Caillou-From Houma Navigation Canal to Caillou Bay (Estuarine), LA120703_00-Bayou Du Large-From 1/2 mile north of St. Andrews Mission to Caillou Bay (Estuarine)

LA120508_00- Houma Navigation Canal-From Bayou Pelton to 1 mile south of Bayou Grand Caillou (Estuarine)
The 2024 LDEQ report states that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating) and Fish and Wildlife Propagation (fishing). There are two impairments for this subsegment. The impairments are for Primary Contact Recreation (swimming) and Oyster Propagation. The IRC categories for these impairments are IRC-4a and IRC-5. The suspected sources for the impairments that resulted in the IRC category are: Livestock (Grazing or Feeding Operations); On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems); Sewage Discharges in Unsewered areas

LA120701_00- Bayou Grand Caillou-From Houma Navigation Canal to Caillou Bay (Estuarine)
The 2024 LDEQ report states that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating), Fish and Wildlife Propagation (fishing), and Oyster Propagation. There is one impairment for this subsegment. The impairment is for Primary Contact Recreation (swimming). The IRC category for this impairment is IRC-5. The suspected sources for the impairment that resulted in the IRC category are: Livestock (Grazing or Feeding Operations); On-Site Treatment Systems (Septic Systems and Similar Decentralized Systems); Sewage Discharges in Unsewered areas.

LA042203_00-Bay Boudreau
The 2024 LDEQ report states that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating) and Oyster Propagation. The is one impairment for this subsegment. The impairment is for Primary Contact Recreation (swimming). The IRC category for this impairment is IRC 2. The suspected sources of the impairment is unknown. There is one subsegment that is labeled as Insufficient data to make reliable determination: Fish and Wildlife Propagation.

LA042003_00-Bayou La Loutre-From MRGO to Eloi Bay (Estuarine)
The 2024 LDEQ report stated that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating) and Fish and Wildlife Propagation. There are two impairments for this subsegment. The impairments are for Primary Contact Recreation (swimming) and Oyster Propagation. The IRC categories for these impairments are IRC 2 and IRC 5. The suspected source of the impairment is unknown.

LA020902_00-Little Lake (Estuarine)
The 2024 LDEQ report stated that this subsegment is labeled as Fully Supporting for Primary Contact Recreation (swimming), Secondary Contact Recreation (boating), and Oyster Propagation. There is one impairment for this subsegment. The impairment is for

Fish and Wildlife Propagation. The IRC category for this impairment is IRC-5RC. The suspected source of the impairment is Natural Sources.

LA120704_00-Bayou Terrebonne-From Humble Canal to Lake Barre (Estuarine)
The 2024 LDEQ report stated that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating), Fish and Wildlife Propagation, and Oyster Propagation. There is one impairment for this subsegment. The impairment is for Primary Contact Recreation (swimming). The IRC category for this impairment is IRC-5. The suspected source of the impairment is Marina/Boating Sanitary on Vessel Discharges; Sewage Discharges in Unanswered areas.

LA120706_00-Bayou Blue-From Bully Camp Canal to Lake Raccourci (Estuarine)
The 2024 LDEQ report stated that this subsegment is labeled as Fully Supporting for Primary Contact Recreation (swimming), Secondary Contact Recreation (boating), Fish and Wildlife Propagation (fishing), and Oyster Propagation. This IRC category for this subsegment is IRC 1.

LA120701_00-Bayou Grand Caillou-From Houma Navigation Canal to Caillou Bay (Estuarine)
The 2024 LDEQ report stated that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating), Fish and Wildlife Propagation (fishing), and Oyster Propagation. There is one impairment for this subsegment. The impairment is for Primary Contact Recreation (swimming). The IRC category for this impairment is IRC-5. The suspected source of the impairment is On-site treatment systems (Septic systems and similar decentralized systems).

LA120703_00-Bayou Du Large-From 1/2 mile north of St. Andrews Mission to Caillou Bay (Estuarine)
The 2024 LDEQ report stated that this subsegment is labeled as Fully Supporting for Secondary Contact Recreation (boating) and Fish and Wildlife Propagation (fishing). There are two impairments for this subsegment. The impairments are for Primary Contact Recreation (swimming) and Oyster Propagation. The IRC categories for these impairments are IRC 4a and IRC 5. The suspected source of the impairment is On-site treatment systems (Septic systems and similar decentralized systems).