

## APPENDIX A: 2022 Integrated Report of Water Quality in Louisiana

Appendix A is taken from Louisiana's 2020 ATTAINS database, which contains all water quality assessments for the state. All suspected causes of impairment and suspected sources of impairment are linked in a one to one fashion, meaning, a reported suspected cause of impairment is believed to be affected by the suspected source of impairment provided on the same line of the table. However, as a result of this linking, some suspected causes and/or sources may be listed more than once for a given water body subsegment. This results in cases where a suspected cause of impairment has two or more suspected sources of impairment. Likewise, if a suspected source of impairment affects two or more suspected causes of impairment, the suspected source will be listed more than once. This is important to note in order to prevent double counting when attempting to develop subtotals for the size or number of water bodies affected by a given suspected cause or suspected source of impairment.

The full water quality assessment spreadsheet is contained in Appendix A in the document 20\_IR1\_FINAL\_Appendix\_A\_All\_Assessments.

An interactive map showing use support for the three primary designated uses of Primary Contact Recreation, Secondary Contact Recreation and Fish and Wildlife Propagation will be created following final approval by USEPA and made available on the LDEQ website at: <https://www.deq.louisiana.gov/page/louisiana-water-quality-integrated-report>.

### Assessment Table Header Information

Type = water body type

R = river

L = lake

E = estuary

W = wetland

C = coastal waters

### Designated Uses and Codes:

PCR = primary contact recreation (swimming)

SCR = secondary contact recreation (boating)

FWP = fish and wildlife propagation

DWS = drinking water supply

ONR = outstanding natural resource waters

AGR = agriculture

OYS = oyster propagation

LAL = FWP subcategory of limited aquatic life and wildlife

**IR Category and TMDL Codes:**

IR Category for Suspected Causes = Integrated Report Category. See Part III, Chapter 2 in the IR text for details of these categories.

TMDL Priority = priority order in which TMDLs will be developed, based on LDEQ 303(d)/TMDL Vision.

**Designated Use Support Statements**

Designated uses are assessed as either fully supported or not supported based on water quality assessment procedures described in Part III, Chapter 2 of this report. In some cases insufficient data or no data are available with which to make an assessment. Where a designated use exists for a water body subsegment, letters are used in that column to indicate the 2020 assessment of that use. These letters are defined as follows:

- F = Fully supporting the designated use
- N = Not supporting the designated use
- I = Insufficient data to make an assessment
- X = No data with which to make an assessment

**Descriptions of Louisiana's Watershed Basins**

For water quality management purposes, Louisiana is divided into 12 large-scale watershed basins. These basins are based on 11 river watersheds plus the Lake Pontchartrain watershed. For management purposes, these basins were assigned numbers for use in watershed segment and subsegment delineation. These subsegments are described in more detail in Part II, Chapter 2 of this report. The 12 basins and their associated numbers are:

- Atchafalaya River Basin (01)
- Barataria Basin (02)
- Calcasieu River Basin (03)
- Lake Pontchartrain Basin (04)
- Mermentau River Basin (05)
- Vermilion-Teche Basin (06)
- Mississippi River Basin (07)
- Ouachita River Basin (08)
- Pearl River Basin (09)
- Red River Basin (10)
- Sabine River Basin (11)
- Terrebonne Basin (12)

Descriptions of the twelve Louisiana basins follow.

### **ATCHAFALAYA RIVER BASIN (01)**

The Atchafalaya River Basin is located in the south central part of Louisiana. The Atchafalaya River is a distributary of the Red, Black, and Mississippi Rivers, presently carrying about 30% of the Mississippi's flow. The basin is well-defined by a system of levees, which surround it on the north, east, and west. The entire basin serves as a major floodway for Mississippi River floodwaters. It encompasses approximately 1,806 square miles and is predominantly wooded lowland and cypress-tupelo swamp with some fresh water marshes in the lower distributary area. It constitutes the largest contiguous fresh water swamp in the United States.

### **BARATARIA BASIN (02)**

The Barataria Basin lies in the eastern coastal region of the state. This basin is bounded on the north and east by the lower Mississippi River, on the west by Bayou Lafourche, and on the south by the Gulf of Mexico. The major receiving water body in this basin is Barataria Bay. The Barataria Basin consists largely of wooded lowlands and fresh to brackish marshes, having some saline marsh on the fringes of Barataria Bay. Elevations in this basin range from minus two feet to four feet above sea level.

### **CALCASIEU RIVER BASIN (03)**

The Calcasieu River Basin is located in southwestern Louisiana and is positioned in a north-south direction. The drainage area of the Calcasieu Basin comprises approximately 3,910 square miles. The headwaters of the Calcasieu River are located in the hills west of Alexandria and the river flows south for about 160 miles to the Gulf of Mexico. The mouth of the river is about 30 miles east of the Texas-Louisiana state line. The landscape in this basin varies from pine-forested hills in the upper end to brackish and salt marshes in the lower reach around Calcasieu Lake.

Maps showing use support for the three most significant designated uses of primary contact recreation (swimming), secondary contact recreation (boating), and fish and wildlife propagation (fishing) are on the following three pages.

### **LAKE PONTCHARTRAIN BASIN (04)**

The Lake Pontchartrain Basin, located in southeastern Louisiana, consists of the tributaries and distributaries of Lake Pontchartrain, a large estuarine lake. The basin is bounded on the north by the Mississippi state line, on the west and south by the east bank Mississippi River levee, on the east by the Pearl River Basin, and on the southeast by Breton and Chandeleur Sounds. This basin includes Lake Borgne, Breton Sound, Chandeleur Sound, and the Chandeleur Islands. The northern part of the basin consists of wooded uplands, both pine and hardwood forests. The southern portions of the basin consist of cypress-tupelo swamps, lowlands, and both brackish and saline marshes. The marshes of the southeastern part of the basin constitute the most rapidly eroding area along the Louisiana coast. Elevations in this basin range from minus five feet at New Orleans to over 200 feet near the Mississippi border.

### **MERMENTAU RIVER BASIN (05)**

The Mermentau River Basin is located in southwestern Louisiana and encompasses the prairie region of the state and a section of the coastal zone. The Mermentau River Basin is bounded on the north and east by the Vermilion-Teche Basin, on the west by the Calcasieu River Basin, and on the south by the Gulf of Mexico.

### **VERMILION-TECHE BASIN (06)**

The Vermilion-Teche River Basin lies in south central Louisiana. The upper end of the basin lies in the central part of the state near Alexandria, and the basin extends southward to the Gulf of Mexico. The basin is bordered on the north and northeast by a low escarpment and the lower end of the Red River Basin. The Atchafalaya River Basin is to the east, and the Mermentau River Basin is to the west.

### **MISSISSIPPI RIVER BASIN (07)**

The upper Mississippi River, which flows south, forms the boundary between Louisiana and Mississippi. The lower Mississippi River flows southeasterly through the southeast section of Louisiana. The upper stretch of the Mississippi does not receive any tributary flow from the Louisiana side, which is leveed. Tributaries do enter from Mississippi, including the Yazoo River, the Black River, the Homochitto River, the Buffalo River, and Bayou Pierre. The stretch of the Mississippi River between the Old River Control Structure and Baton Rouge does receive tributary flow from Thompson's Creek, Bayou Sara, Tunica Bayou, and Monte Sano Bayou. The river is leveed on both the east and west banks from Baton Rouge below Monte Sano Bayou to Venice. This stretch of the river is also heavily industrialized, receiving numerous industrial discharges from Baton Rouge to New Orleans. The birdfoot delta of the Mississippi, where it flows into the Gulf, consists of fresh and intermediate marshes.

### **OUACHITA RIVER BASIN (08)**

The Ouachita River's source is found in the Ouachita Mountains of west central Arkansas near the Oklahoma border. The Ouachita River flows south through northeastern Louisiana and joins with the Tensas River to form the Black River, which empties into the Red River. The Ouachita Basin covers over 10,000 square miles of drainage area. Most of the basin consists of rich, alluvial plains cultivated in cotton and soybeans. The northwest corner of the basin is forested in pine, which is commercially harvested.

### **PEARL RIVER BASIN (09)**

The Pearl River Basin lies along the southeastern Louisiana – southwestern Mississippi border. This basin is bordered on the north by the Mississippi state line and on the west and south by the Lake Pontchartrain Basin. Elevations in the basin range from 350 feet above mean sea level in the northwest portions to sea level at the southern end. Correspondingly, the vegetation varies from pine forests to brackish marsh.

### **RED RIVER BASIN (10)**

The Red River has its origin in eastern New Mexico and flows across portions of Texas, Oklahoma and Arkansas before entering northwestern Louisiana. The river flows south to Shreveport, where it turns southeast and flows for approximately 160 miles to its junction with the Atchafalaya River. From the Arkansas state line to Alexandria, the Red River is contained within high banks, which range from 20 to 35 feet above low water level. Below Alexandria, the river flows through a flat alluvial plain, which is subject to backwater flooding during periods of high water. The Sabine River Basin lies to the southwest of the Red River Basin, and the Ouachita River Basin lies to the east. The Calcasieu, Vermilion-Teche, and Atchafalaya River Basins lie south of the Red River Basin. The Red River drains approximately 7,760 square miles within Louisiana.

### **SABINE RIVER BASIN (11)**

The Sabine River Basin lies along the Texas-Louisiana border, encompassing more than 2,900 square miles of drainage area within Louisiana. The stretches from the Texas state line near Shreveport to the Gulf of Mexico. It is bounded on the east by the Red River Basin and Calcasieu River Basin. Characteristic vegetation ranges from mixed forests in the upper basin to hardwoods in the mid-section and brackish and saline marshes in the lower end.

### **TERREBONNE BASIN (12)**

The Terrebonne Basin covers an area extending approximately 120 miles from the Mississippi River on the north to the Gulf of Mexico on the south. It varies in width from 18 miles to 70 miles. This basin is bounded on the west by the Atchafalaya River Basin and on the east by the Mississippi River and Bayou Lafourche. The topography of the entire basin is lowland, and all the land is subject to flooding except the natural levees along major waterways. The coastal portion of the