

State of Mississippi Water Quality Assessment 2016 Section 305 (b) Report

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY





State of Mississippi Water Quality Assessment 2016 Section 305(b) Report



Department of Environmental Quality

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ABSTRACT

Section 305(b) of the Federal Clean Water Act (CWA) requires each state to describe the quality of their water resources in a report for the United States Environmental Protection Agency (USEPA), Congress, and the public on a biennial basis. The Mississippi Department of Environmental Quality (MDEQ), as the lead agency for environmental protection in Mississippi, is the state agency responsible for generating this report. The purpose of Mississippi's 2016 Water Quality Assessment §305(b) Report is to comprehensively describe for USEPA, Congress, and the public the status of the quality of the state's surface waters. This 2016 §305(b) report fulfills all reporting requirements under §305(b) of the CWA. Along with the water quality assessment information, the report also describes the state's assessment methodology and gives the causes, where known, for those waters identified as impaired. Additionally, Mississippi's surface water quality monitoring program is described in this report.

ACKNOWLEDGEMENTS

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List of Acronyms

ADB	Assessment Database	
ALUS	Aquatic Life Use Support	
AU	Assessment Unit	
BEACH	Beaches Environmental Assessment and Coastal Health	
BOD	Biochemical Oxygen Demand	
CALM	Consolidated Assessment and Listing Methodology	
CWA	Clean Water Act	
DDT	Dichloro-Diphenyl-Trichloroethane	
DO	Dissolved Oxygen	
EMAP	Environmental Monitoring and Assessment Program	
FDA	US Food and Drug Administration	
FSD	Field Services Division	
GCRL	University of Southern Mississippi Gulf Coast Research Laboratory	
GIS	Geographic Information Systems	
M-BISQ	Mississippi Benthic Index of Stream Quality	
MDEQ	Mississippi Department of Environmental Quality	
MDMR	Mississippi Department of Marine Resources	
MDWFP	Mississippi Department of Wildlife Fisheries and Parks	
NCA	National Coastal Assessment	
NCTF	Nutrient Criteria Task Force	
NHD	National Hydrography Dataset	
NHEERL	USEPA Gulf Ecology Division National Health and Environmental	
	Effects Research Laboratory	
NOAA	National Oceanic and Atmospheric Administration	
NPDES	National Pollutant Discharge Elimination System	
NPS	Non Point Source	
NRCS	National Resource Conservation Service	
NSSP	National Shellfish Sanitation Program	
OPC	Office of Pollution Control	
ORD	US EPA Office of Research and Development	
PCBs	Polychlorinated Biphenyls	
QAPP	Quality Assurance Project Plans	
QC	Quality Control	
RU	Reporting Unit	
SI	Stressor Identification	
SOP	Standard Operating Procedures	
STORET	STOrage and RETrevial System	
SWMP	Surface Water Monitoring Program	

TDS	Total Dissolved Solids
TMDL	Total Daily Maximum Load
TSI	Trophic State Index
TVA	Tennessee Valley Authority
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
USM	University of Southern Mississippi
USNPS	US National Park Service
WADES	Water Assessment Data Entry System
WQS	Water Quality Standards

PART I INTRODUCTION

Introduction Background and Purpose

According to the Federal Clean Water Act (CWA), §305(b) requires each state to describe the quality of their water resources, both surface water and ground water, in a report for the United States Environmental Protection Agency (USEPA), Congress, and the public on a biennial basis. The Mississippi Department of Environmental Quality (MDEQ), as the lead agency for environmental protection in Mississippi, is the state agency responsible for generating this report. MDEQ is committed to ensuring that everyone, regardless of race, culture, or income enjoys a healthy environment in which to live, learn, and work. For more information on the agency's mission, organizational structure, programs, and contacts, visit MDEQ's web site at www.deq.state.ms.us.

Historically, §305(b) reporting has involved comprehensive statewide assessments every two years since CWA was passed in 1972. Section 305(b) ground water assessments are updated separately. This report is designed to be comprehensive in nature, based upon the most current updated information applicable for statewide assessment of Mississippi's surface waters.

For §305(b) assessment, surface water quality data and other environmental information collected on the state's streams, rivers, lakes, estuaries, and coastal waters are compiled, summarized, and analyzed. In addition, ground water data and information are also assessed for the aquifers in the state. Monitoring data are routinely collected by MDEQ statewide through several different monitoring activities. These activities include Ambient Monitoring Networks, Program Support Monitoring Network, intensive surveys, and other special water quality studies. Data are used for many varied purposes, and are collectively analyzed and considered for assessment as part of the §305(b) water quality assessment process. In order to provide a thorough assessment, data are also solicited from and provided by other agencies, institutions, and private entities that conduct monitoring activities in the state.

The purpose of Mississippi's 2016 Water Quality Assessment §305(b) Report is therefore to comprehensively describe for USEPA, Congress, and the public the status of the quality of the state's surface waters. Along with the water quality assessment information, the report also describes the state's assessment methodology and gives the causes for those waters identified as impaired.

This 2016 §305(b) report is a comprehensive statewide report of surface water quality based on data collected from January 2010-December 2014. This report presents a compilation and summary of data collected statewide; only data collected within the reporting window are used for assessment. Beginning in 2001, more rigorous data quality and quantity requirements have been employed by MDEQ to ensure only scientifically-defensible data are used in the §305(b) assessment process.

For the §305(b) report, all data and information are considered for assessment but only water quality data that meet data quantity and quality requirements according to the state's Consolidated Assessment and Listing Methodology (CALM) (DEQ 2016) are assessed. MDEQ follows USEPA guidance for the development of the §305(b) report and the CALM (USEPA

1997, USEPA 2002, USEPA 2006). Assessment involves analysis of monitoring data and information to determine if a waterbody meets its designated use or uses. Water bodies are assigned one or more designated use(s) based on waterbody classifications as outlined in the state's Water Quality Standards (11 Miss. Admin. Code Pt. 6, Ch. 2) {WQS}. Designated uses assessed are: aquatic life support, water contact recreation, fish/shellfish consumption, and/or drinking water supply. Waters assessed as not attaining their use(s) in the §305(b) assessment process become candidates for listing on Mississippi's §303(d) list (MDEQ 2016).

Mississippi's Surface Waters

Mississippi lies predominantly within the East Gulf Coastal Plain physiographic region except for a small part of northeastern Mississippi which is part of the Interior Low Plateaus Province. The state is characterized with low to moderate topographic elevations, and slopes generally from the north southward to the Gulf of Mexico. The climate of the state is humid and subtropical with climatic variations influenced by the large land mass to the north and the Gulf of Mexico to the south. Mean annual precipitation ranges from 50 inches in the north to 65 inches near the coast. Most rainfall occurs in the spring for the majority of the state; but on the coast, July, August and September often have more rainfall. Fall is the driest season statewide with streams and rivers generally reaching their lowest stage for the year during October. Temperatures in the state vary with latitude and in the winter average from 31°F in the north to 43°F on the coast. Summer temperatures throughout Mississippi average 90°F with frequent excursions above 100°F especially in the south.

Mississippi has a population in excess of 2,938,618 (US Census Bureau 2006 Projection) and covers a surface area of 47,689 square miles. The state is divided into ten major river basins with a total length of streams in excess of 82,000 miles. Of these miles, 32% are perennial characterized by flowing water throughout the year. Intermittent streams which flow during rainy seasons but are dry during summer months represent 65% of Mississippi's total stream mileage. There are over 2,400 miles of man-made ditches and canals in the state. The Mississippi River (approximately 400 miles) and the Pearl River (approximately 80 miles) form Mississippi's border with Arkansas and Louisiana on the west side of the state. The state is covered with hundreds of publicly owned lakes, reservoirs and ponds covering a combined area of approximately 260,000 acres. According to landuse information, wetlands cover an estimated 2,728,000 acres with tidal marsh comprising approximately 53,000 acres of this total. The southern edge of Mississippi's contiguous land mass borders the Mississippi Sound with the coastline along the Mississippi Sound totaling approximately 84 miles. The total area of estuarine waters is approximately 758 square miles. This area includes the St. Louis Bay, Back Bay of Biloxi, Pascagoula Bay, Mississippi Sound, and the portion of the Gulf of Mexico that extends three miles south of the Barrier Islands. A tabular summary of the information given above can be found in Table 1.

Table 1: Mississippi Atlas

State Population	2,938,618
State surface area (square miles)	
Number of river basins	
Total number of river and stream miles*	
- Number of perennial river miles (subset)*	
- Number of intermittent stream miles (subset)*	53,351
- Number of ditch and canal miles	2,424
Number of lakes/reservoirs/ponds (>25 acres)	1,251
Acres of lakes/reservoirs/ponds (>25 acres)	259,533
Square miles of estuaries/harbors/bays	753
Number of coastal miles	84
- Number of Public Recreational Beach Miles	42
Acres of freshwater wetlands	2,728,072
Acres of tidal wetlands	

*From USEPA NHD estimates

All waters of the state are classified for uses consistent with the goals of the Clean Water Act. Waters are classified according to one or more of the following classifications: Public Water Supply, Shellfish Harvesting, Recreation, Fish and Wildlife, and Ephemeral Stream. These classifications are explained fully in the state's water quality standards (WQS 11 Miss) available on MDEQ's web site. A summary of classified uses of state waters is found in Table 2.

	Total Size According to Classification				
				Coastal	
			Estuaries	Shoreline	
Classified Use	Rivers (miles)	Lakes (acres)	(sq. miles)	(miles)	
Fish & Wildlife ^a	82,154	140,627			
Public Water					
Supply ^{ab}	87	13,597			
Recreation ^b	1,043	93,159	728		84
P. Water Supply &					
Rec. ^{ab}		22,577			
Shellfish					
Harvesting ^{bc}			6		
Recreation/Shellfish ^b			32		
Ephemeral	113				

^aAlso suitable for Secondary Contact Recreation

^bAlso suitable for Fish and Wildlife

^cAlso suitable for Recreation

PART II

SURFACE WATER ASSESSMENT METHODOLOGY AND STATEWIDE ASSESSMENT SUMMARY

Assessment Methodology Introduction

Surface water quality assessments are technical reviews of physical, chemical, bacteriological, biological, and/or toxicological monitoring data as well as other information to determine the quality of surface water resources. A primary goal of surface water quality assessments, as required by §305(b), is to determine if the state's surface waters are meeting the fishable and swimmable goals of the CWA. A secondary goal of the §305(b) assessment process is to provide the necessary information on waterbody impairment for use in the development of the state's §303(d) list.

Surface water quality assessments are general characterizations of waterbody health and involve comparing data to the state's Water Quality Standards (WQS). Mississippi's WQS specify the appropriate levels for which various water quality parameters or indicators support a waterbody's designated use(s). Each use assessed for a waterbody is determined to be either "Attaining" or "Not Attaining" in accordance with the applicable water quality standards and USEPA guidelines for assessments pursuant to §305(b). A waterbody's use is said to be impaired when, based on current and reliable site-specific data of sufficient quantity, quality, and frequency of collection, it is not attaining its designated use(s). Where data and information of appropriate quality and quantity indicate non-attainment of a designated use or uses for an assessed waterbody, the waterbody will be placed on the Mississippi 2016 Section 303(d) List of Impaired Water Bodies (MDEQ 2016) and be subject to further monitoring and/or Total Maximum Daily Load (TMDL) development. Assessments are necessary to answer basic questions like:

- Does this waterbody support a healthy and diverse aquatic life for fish and other aquatic organisms?
- Is this waterbody safe for swimming?
- Are fish caught in this waterbody safe to eat?

To achieve the goals of the CWA, it is necessary to have requirements and guidelines for how water quality data are collected, analyzed, and assessed. A consistent and scientifically-defensible assessment methodology provides the mechanism to enable and support sound decision-making. The USEPA has developed, with state and public input, a national guidance document for the §305(b) assessment and §303(d) listing process. This Consolidated Assessment and Listing Methodology (CALM), finalized by USEPA in 2002, provides a framework for states to document and report how they collect and use water quality data and information for their §305(b) reporting and §303(d) listing process. USEPA recommended the use of the CALM guidance for the 2016 assessment but also allowed states flexibility and the option of using previous §305(b) guidance for water quality assessment purposes. For the Mississippi 2016 assessment, MDEQ has developed a document entitled Mississippi Consolidated Assessment and Listing Methodology (CALM) 2016 Assessment and Listing Cycle (MDEQ 2016) which can be provided upon request or found at www.deq.state.ms.us. The purpose of this document is to specify MDEQ's data requirements and assessment guidelines for the 2016 §305(b) assessment and §303(d) listing cycle. Mississippi's CALM document primarily reflects USEPA CALM recommendations but also retains some elements of previous §305(b) guidance.

Water Quality Standards

Surface waters in Mississippi are used for a number of purposes. Waters are used for drinking and food processing, shellfishing, recreation, fishing, and aquatic life support. Water bodies are classified and assigned various use classifications by MDEQ in the state's Water Quality Standards based on the use of the waterbody identified by the public and other entities. The use classifications and associated USEPA designated uses for water quality assessment purposes recognized by the State of Mississippi are as follows:

Use Classification	USEPA Associated Designated Use
Public Water Supply	Drinking Water Supply
Recreation	Contact Recreation
Fish and Wildlife	Aquatic Life Use, Fish Consumption,
	Secondary Contact Recreation
Shellfish Harvesting	Shellfish Consumption

Most of Mississippi's waters are classified as Fish and Wildlife. For each of the use classifications listed above, there are various water quality criteria or standards that apply to those waterbody uses. These criteria are used in the assessment process. A waterbody (part or all of a stream, river, lake, estuary or coastline) should support one or more of these uses. A complete description of Mississippi's waterbody use classifications and water quality standards can be found in the state's WQS.

Mississippi 2016 §305(b) Assessment Methodology

Water quality data and information can take many different forms, from simple observations to routine fixed network monitoring and intensive surveys with extensive water chemistry, biology, and physical data sampling. For §305(b) Water Quality Assessment Reports, MDEQ assesses the state's streams, rivers, lakes, and estuaries by considering all existing and readily available information. This process is not limited to data collected only by MDEQ. MDEQ solicits available water quality data and information from various state, federal, public, and private sources. Data solicitation is facilitated through Mississippi's Basin Management Approach. The public may also submit water quality data for consideration at any time. This broad spectrum of available data is considered when making water quality assessments.

Data Representativeness

Previous USEPA §305(b) guidance, Guidelines for Preparation of the Comprehensive State Water Quality Assessments (§305(b) Reports) and Electronic Updates: Supplement (USEPA 1997), promoted the use of two types of assessments: "evaluated" and "monitored". MDEQ historically used evaluated and monitored assessments to make broader water quality statements to compensate for limited monitoring coverage. A waterbody assessed using evaluated data is defined as one for which the use support decision is based on information other than site-specific monitoring data. Such information includes land use surveys, incidents of pollution spills/fish kills, point source discharge data, and monitoring data greater than 5 years old. These data generally have a greater degree of uncertainty in characterizing in-stream water quality condition than assessments based upon site-specific in-stream monitoring data. Prior to 2002, this evaluated information was used in the assessment process as specified by USEPA §305(b) guidance.

MDEQ, as a general rule, will only use site-specific monitoring data of sufficient quality and quantity for making final water quality §305(b) assessments and §303(d) listing decisions. Any remaining information and monitoring data not meeting CALM requirements for data sufficiency will be used for a non-attainment assessment decision when those data and information demonstrate compelling evidence of water quality degradation of the overall condition of a waterbody, as defined in Mississippi's CALM document, and data quality documentation is available. If there is no documented data quality information, data do not meet data quality objectives, and/or data demonstrate potential impairment but at a lesser degree, the waterbody will be placed on a targeted monitoring list to confirm the actual water quality condition.

Section 305(b) water quality assessments are based on one or more different types of monitoring data that have been grouped together by waterbody and then analyzed collectively in order to determine the water quality status or condition of the waterbody. Monitoring data used for §305(b) assessments primarily consist of one or more of the following data types: physical/chemical, biological, habitat, bacteriological, and/or toxicological. Current site-specific ambient monitoring data are considered to most accurately portray water quality conditions. A waterbody is classified as monitored if sufficient (both in quantity and quality) physical, chemical, biological, biological, bacteriological, and/or fish tissue data were collected on the waterbody at any time within the data window established for the §305(b) reporting period. For the 2016 §305(b) report, this data window is from 2010-2014.

Physical and chemical data include parameters such as pH, temperature, dissolved oxygen, nutrients, suspended solids, turbidity, specific conductance, and certain water column toxicants. Chemical monitoring data are compared to applicable numeric water quality criteria as found in MDEQ's most current version of the WQS document (WQS 11 Miss). This allows MDEQ to determine which pollutant specific numeric criteria are

violated. These criteria are used for aquatic life, recreation, shellfish consumption, and drinking water use assessment.

Biological data may include the community structure of aquatic insects and other benthic macroinvertebrates, fish, or algae as well as the condition of biological habitat in the waterbody. The biota of a waterbody reflect the physical, chemical, and biological integrity of the system and are considered to be direct indicators of Aquatic Life Use Support (ALUS). For Mississippi §305(b) assessments, benthic macroinvertebrate community data are the biological indicator primarily used to determine ALUS. Biological data collected as part of the Mississippi Benthic Index of Stream Quality (M-BISQ), MDEQ's biological monitoring network for wadeable streams, have been the primary source of data for ALUS assessments in Mississippi waters, due to rigorous project data quality objectives and a robust data set.

Bacteriological data include water column surveys for fecal coliform bacteria or other bacteriological indicators (i.e., enterococci). These data are used to assess the recreation use for waters to protect the public in swimming and other water related activities. For the 2016 §305(b) assessment, bacteriological data identified as meeting Mississippi CALM requirements were provided by the MDEQ Beach Monitoring Program and MDEQ Recreational Monitoring Network. Fecal coliform data are also used indirectly for assessment of the Shellfish Consumption use. Shellfish Consumption use assessment is accomplished through the review of the current shellfish harvesting classification of Mississippi coastal waters established by the National Shellfish Sanitation Program (NSSP) in Mississippi. The NSSP is administered by the Mississippi as either approved, conditionally approved, restricted or prohibited, based on results of fecal coliform monitoring conducted by MDMR.

Fish tissue data include the analyses of fish flesh for the presence of toxic organic chemicals and metals. For this report, the Fish Consumption Use is assessed only for non-attainment based on whether MDEQ and the Mississippi Department of Health have issued a Fish Tissue Advisory for a waterbody in the state. If an advisory for "restricted" or no consumption is in place and is supported by waterbody-specific fish tissue monitoring, the waterbody is assessed as not attaining this use.

The length of record of the data, the type of data and the frequency of data collection are considered when making use support determinations. According to the Mississippi CALM, at least 10 data points within a five-year period are required for conventional parameters and 10 data points within three years are required for assessment of toxicants. For bacteria data, not including data from the MDEQ Beach Monitoring Program, a minimum of five fecal coliform samples collected over a 30-day period in each season (summer and winter) over two years are necessary for bacteriological assessment. For MDEQ beach monitoring data, a total of 20 enterococci samples are needed in each season over a period of two years to meet CALM requirements.

In general, data utilized in §305(b) assessments are collected, analyzed, and interpreted in a manner consistent with state and USEPA guidelines.

Data Quality

The ability to make meaningful and scientifically defensible statements about the overall status of a waterbody depends directly on the vigor and quality under which the data are collected, analyzed, and reported. Data generated by MDEQ, other agencies, and individuals should be of the quality and quantity necessary to make credible and realistic assessment decisions on the condition of the state's waters. Whenever possible, data need to be of the highest quality and developed using sampling and analytical protocols and standard operating procedures recognized by state and USEPA quality assurance (QA) program plans. Data will not be assessed from data-reporting entities that do not provide data quality information or documented SOPs or procedures to support the data.

Waterbody Use Support Determination

Use support decisions are made based on a cumulative evaluation of all the monitoring data coupled with any other existing and readily available information for an individual waterbody. A detailed description of the assessment methodology used by MDEQ for the 2016 §305(b) Assessment and §303(d) Listing process is provided upon request. The Mississippi CALM describes the minimum data quantity and quality needed to meet data sufficiency requirements for assessment. Decision-making criteria for attainment and non-attainment of each designated use are also presented in that document. These guidelines apply, as appropriate, to rivers, streams, lakes, estuaries, and coastal waters.

Within the water quality assessment process, a certain degree of uncertainty is inherent for any assessment decision made. The correctness of data analysis is directly dependent on study design, data quantity, data quality, and the accuracy and rigor of the methods used in collection, laboratory analysis, and the assessment process itself. All data used to make formal assessments of the quality of the state's waters, regardless of its source, will be evaluated in keeping with the requirements and guidelines contained in Mississippi's CALM document.

Assessment Database (ADB)

All information collected during the assessment process is placed in Mississippi's version of USEPA's Assessment Database (ADB), which has been customized to facilitate Mississippi's assessment and reporting needs. The ADB is useful for maintaining the quality and consistency of waterbody assessments. Information placed in ADB for each waterbody includes location and description, designated use, assessment types, assessment category (1-5 according to USEPA's Integrated Listing protocol), use support determinations, causes of impairment, and sources of impairment. The ADB allows for the linking of impairment causes and sources with different uses for the same waterbody and is used to generate the various required summary tables for each waterbody type. Electronic ADB files for the §305(b) assessment are submitted to USEPA for compilation with data from the other states.

All water bodies cataloged in the ADB are also geo-referenced. Using Arc Info software, in conjunction with the National Hydrography Dataset (NHD) coverage, all waterbody assessments are assigned a unique identifier or assessment unit (AU) that is designated according to where the waterbody is located within a 12-digit subwatershed. The 12-digit subwatershed is referred to as the reporting unit (RU). The combination of the RU and the AU results in a 6 digit unique identifier that is cataloged in the ADB to store and track assessment information. The first number identifies the basin in which the waterbody is located. The major basins in the state are numbered 1 through 9 in alphabetical order (e.g. 1 is the Big Black River basin, and 9 is the Yazoo River Basin (Figure 1)). The next three digits in the identifier refer to the specific 12 digit subwatershed within the basin, starting with 001 (e.g. 146 located in the Big Black Basin would be 1146). The final two digits in the identifier refer to a specific stream segment within the subwatershed beginning with 11. For instance, Beaver Creek, with waterbody ID 521413 is stream segment 13 in subwatershed 214 in the Pearl River Basin.

All geo-referenced information is provided to USEPA electronically. In addition, individual segment assessment information, similar to what is provided to USEPA Region IV via electronic data files, can be found in Appendix A. These assessments reflect the attainment status and corresponding category designation as of April 1, 2016.

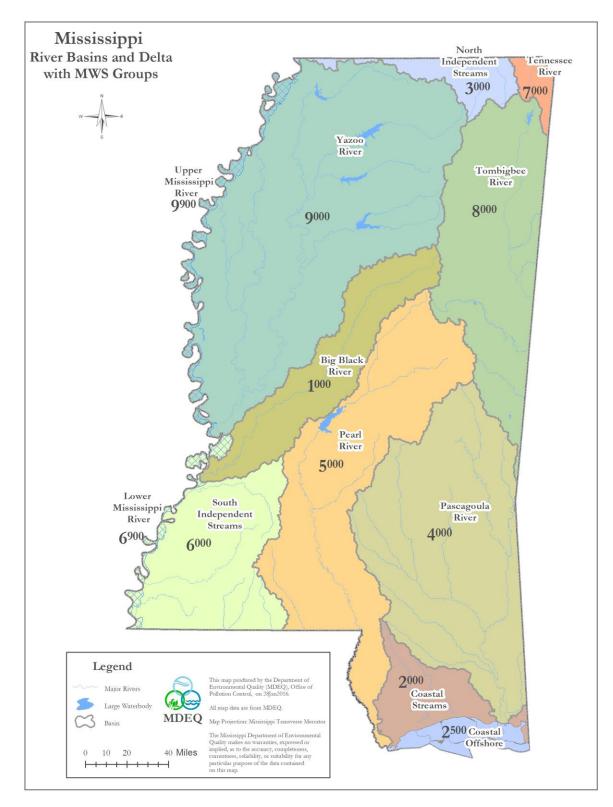


Figure 1: Mississippi River Basins and Delta

Statewide Assessment Summary Designated Use Support-Rivers and Streams

For the 2016 §305(b) Water Quality Assessment Report, MDEQ assessed approximately 11% (2,793 miles) of Mississippi's total 26,379 miles of perennial streams and rivers for one or more uses. The status of water quality on the remaining 89% (23,586 miles) of the state's perennial rivers and streams is unknown. MDEQ collected monitoring data at more than 900 sites in the state (Figure 2).

The low percentage of assessed waters relative to the total stream and river mileage in the state is not an indication of MDEQ's lack of monitoring efforts. The mathematical calculation of miles monitored/assessed is surprisingly low when compared to the total miles of water resources in the state. The resulting assessed mileage is not an accurate depiction of the amount of importance MDEQ places on monitoring the state's surface water resources. It is more a factor of the amount of water resources in the state, available resources, and limitations recommended by USEPA §305(b) guidance on assigning assessed mileage to a monitoring station. As Mississippi's situation attests, it is not practical for a state to monitor all waters for a comprehensive assessment when the state has 82,154 miles of streams and rivers. MDEQ recognizes the need for a combination of monitoring and assessment approaches to address this situation in future assessments. One such tool is probability-based monitoring surveys. This is a more costeffective and efficient way to produce a statistical estimate, of known confidence, describing the condition of a resource based on a random sampling design. Recommended by USEPA for §305(b) assessments, a state can assess 100% of its waters utilizing a probabilistic approach. MDEQ is currently using this methodology as part of the Mississippi Coastal Assessment Program and is planning to expand the probabilistic approach to the state's freshwater resources as funding allows.

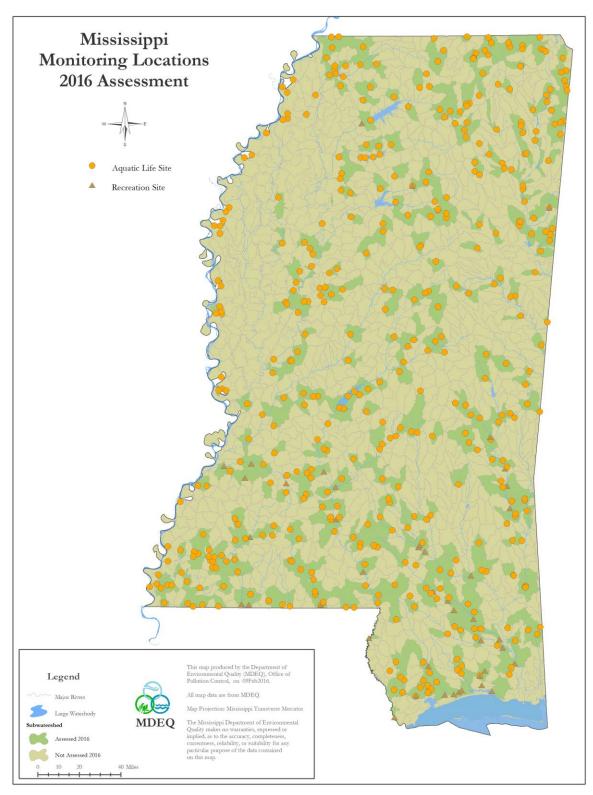


Figure 2: Monitoring Locations in Mississippi

For water bodies with multiple uses assessed, the ADB automatically assigns the waterbody mileages according to the Integrated Reporting category system. This categorization system assigns a waterbody use into one of five categories:

- Category 1: Attaining all uses
- Category 2: Attaining some uses but insufficient information for assessment of other uses
- Category 3: Insufficient information to assess any use
- Category 4: Not attaining a use but a TMDL is not necessary
- Category 5: Not attaining a use and a TMDL is needed

USEPA defines a Category 1 water as having sufficient data to prove there is no impairment for any potential designated use of that waterbody. Mississippi currently has no water bodies assigned to Category 1 due to USEPA requirements that all uses be assessed. Mississippi's assessments are placed in categories 2-5.

Of Mississippi's 26,379 total perennial stream and river miles, approximately 11% (2,793 miles) were assessed (Figure 3).

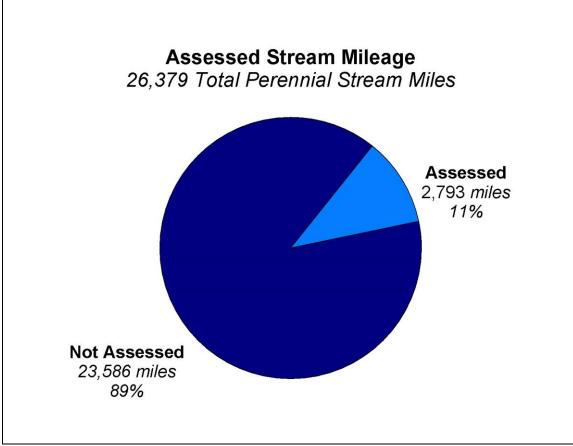


Figure 3: Assessed Stream Mileage Perennial Rivers and Streams

Causes and Sources of Impairment of Designated Uses-Rivers and Streams

Causes and sources of impairment were assigned for streams and rivers having one or more uses impaired. Total assessed sizes of streams and rivers affected by various cause categories are given in Table 3 and depicted in Figure 4. The largest percentage (36%) of miles of assessed water bodies not meeting their designated uses are categorized as biologically impaired. For the biologically impaired waters, the next step in the water quality management process is to conduct stressor identification analyses to identify the stressor(s) causing the impairment. Once the stressor(s) are identified, the TMDL process, where applicable, can proceed. For stressors identified that are attributed to pollution (i.e., a dam or levee) where TMDLs cannot be generated, other water quality management actions will be considered through the Basin Management Approach. Seventeen percent of impairments are caused by sediment. Most of these impairments were determined during the stressor identification process. Pathogens are indicated as the cause of impairment in 14% of the non-attaining water bodies. Other impairments were attributed to pH, nutrients, and organic enrichment/low dissolved oxygen.

The largest percentage of impairment is identified as biological, and the specific sources of the impairment are yet to be determined. As a result, unknown sources contribute to the majority of river miles assessed as not attaining one or more uses. To a lesser extent, pollutants are contributed by contaminated sediments, unspecified nonpoint source activities (i.e., urban, agricultural, silvicultural, and/or industrial runoff), and other smaller sources. As stated above, stressor identification analyses will be conducted for biologically impaired waters to identify sources of pollution contributing to impairment.

Cause Categories	Total Size Miles
Biological Impairment**	818
Nutrients	441
Sedimentation/Siltation	391
Pathogens	316
Organic Enrichment/Low DO	201
pH	134
Total***	2,301

Table 3: Summary of Use Support Impairment Causes for Rivers and Streams

**Definitive cause identification is not possible at the time of assessment. Designation used to report on waters where biological indicators

(macroinvertebrates) were used and impairment was indicated but further investigation needed to identify the cause of the impairment.

***Total exceeds number of actual impaired miles due to presence of multiple impairment causes per assessed waterbody.

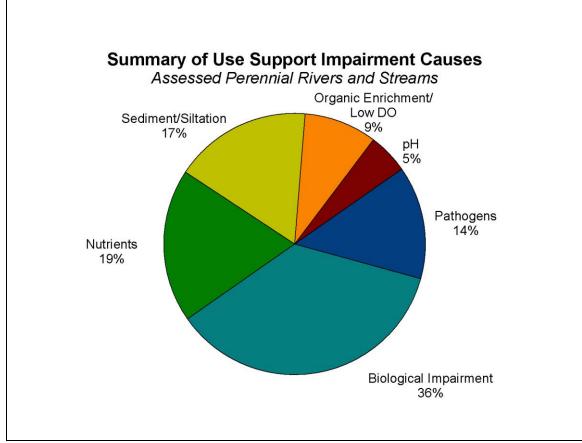


Figure 4: Summary of Use Support Impairment Causes: Rivers and Streams

Assessment Summary for ALUS and Recreation

Assessments for miles of perennial rivers and streams are cataloged by use. A waterbody may have several different uses assessed. Therefore, numbers represented in Tables 4 and 5 are different from the mileages presented earlier in this chapter. The following tables and figures provide the assessment summaries for Aquatic Life Use Support and Recreation Use Support. Fish Consumption use has also been assessed and can be found in Part III of this report. These mileages represent the attainment status assessed for a specific use. Figures 5 and 6 give a summary of use support according to the individual uses assessed.

Status	Miles
Attaining	1,398
Unknown	23,586
Total Not Attaining	1,395
TMDL not needed	525
TMDL needed	869.94
Total Perennial Miles	26,379

 Table 4: Aquatic Life Use Support Summary for Perennial Rivers and Streams

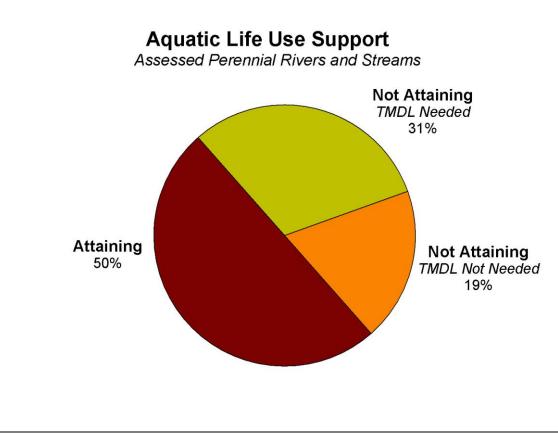


Figure 5: Aquatic Life Use Support Summary

Miles				
71				
26,352				
316				
316				
26,739				

Table 5: Recreation Use Support Summary for Perennial Rivers and Streams

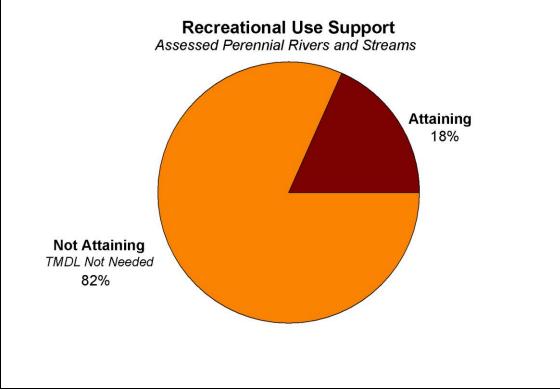


Figure 6: Recreation Use Support Summary

Designated Use Support – Estuaries and Coastal Waters

Mississippi has approximately 84 miles of coastal shoreline between the Alabama/Louisiana state boundaries and 758 square miles of coastal waters including large estuaries, smaller bays and tidal rivers, creeks, and bayous. Inland or bay type estuaries include St. Louis Bay, Back Bay of Biloxi, and Pascagoula Bay. The state's largest estuary (550 square miles) is the Mississippi Sound which extends from the southern edge of the state's contiguous land mass to the Gulf of Mexico and a chain of barrier islands (Cat, Ship, Horn, and Petit Bois Islands) located approximately 11 miles offshore. The state also classifies the Gulf of Mexico as an estuary within Mississippi waters to the state boundary located three miles south of the barrier islands.

Aquatic Life Use Support (ALUS) Assessment

Through the establishment of the Mississippi Coastal Assessment Program (MCA), MDEQ has continued to coordinate the sampling effort that was initiated as part of USEPA's National Coastal Assessment (NCA) monitoring. This monitoring builds upon the data generated through NCA by using the same probabilistic station selection process and collecting data at 25 sites annually. MDEQ's MCA program monitors the core ecological indicators established by the NCA program. Each year, a new set of 25 randomly selected sites are sampled from July – September by MDEQ in cooperation with the University of Southern Mississippi Gulf Coast Research Laboratory (GCRL) in the state's estuaries representing two different strata: large estuaries and small estuaries. Probabilistic site selection is provided by USEPA-Gulf Breeze.

Assessments were based on three conventional parameters: dissolved oxygen, pH, and temperature. These data were used to assess ALUS attainment. Based on MCA data analysis, approximately 98% of all Mississippi coastal waters fully support aquatic life use for these three parameters (Table 6). Results can be further broken down by waterbody type and are provided in Table 7.

Classification	Dissolved Oxygen		Temperature		pН	
All	Attaining	100 %	Attaining	98%	Attaining	100%
Mississippi Coastal	Not		Not		Not	
Waters	Attaining	0%	Attaining	2%	Attaining	0%

Table 6: MCA Conventional Parameter Summary – All MS Coastal Waters

Classification	Dissolved Oxygen		Temperature		рН	
Large	Attaining	100%	Attaining	98.2%	Attaining	100%
Estuaries	Not attaining	0%	Not attaining	1.8%	Not attaining	0%
Small	Attaining	97.2%	Attaining	94.4%	Attaining	100%
Estuaries	Not		Not		Not	
	Attaining	2.8%	Attaining	5.6%	Attaining	0%
Tidal Rivers	Attaining	100%	Attaining	100%	Attaining	100%
and Bayous	Not		Not		Not	
	Attaining	0%	Attaining	0%	Attaining	0%

The larger percentage of low dissolved oxygen in small estuaries is due to several factors. Low dissolved oxygen conditions are common in constricted coastal waters such as estuarine creeks and bayous with most of these conditions naturally occurring during the summer months. Although localized dissolved oxygen problems due to anthropogenic pollution sources can and do occur, naturally high water temperatures, saline/freshwater stratification, and salt marsh interactions are prevalent in Mississippi estuarine waters and frequently combine to cause periods of low dissolved oxygen.

Recreation Use Support Assessment

For the 2016 §305(b) assessment, data from the MDEQ Coastal Beach Monitoring Program were used to assess recreation use support in Mississippi estuarine and coastal shoreline waters. MDEQ, in conjunction with the GCRL, conducts routine bacteria and water chemistry sampling activities at 22 beach stations located along Mississippi's Gulf Coast. The bacterial indicator used for recreation use support assessment purposes in marine and estuarine waters is enterococci. Further information on this monitoring program can be found in Part IV: Coastal Beach Monitoring Network.

Of the 42 miles of Mississippi's public beaches, 28 miles were assessed using the MDEQ Beach Monitoring Program data. Based on these data, 28 miles or 60% of the beaches in Mississippi were attaining primary contact recreation. It should be noted that this assessment represents a five-year reporting period. Beaches are routinely monitored and are safe for swimming unless a beach advisory is in effect. To learn more about Mississippi's beach advisories, see Part III of this report.

Lakes: Statewide Assessment Summary

Lake Water Quality

Mississippi is covered with hundreds of publicly owned lakes, reservoirs, and ponds totaling approximately 260,000 acres. The largest lakes in Mississippi are man-made reservoirs. Grenada Reservoir, Enid Reservoir, Sardis Reservoir and Arkabutla Reservoir in the Yazoo River Basin are used for flood control. The Ross Barnett Reservoir (Pearl River Basin) is used as a source of drinking water for the City of Jackson. All of these large reservoirs support numerous other recreational activities. Pickwick Lake, in the state's northeast corner, is an impoundment of the Tennessee River and is shared with Alabama and Tennessee.



Lake Lee Washington County MS. Photo taken by Charles E. Sullivan

Use Support Determinations

For the 2016 §305(b) Water Quality Assessment report, MDEQ assessed approximately 60% of Mississippi's total 259,533 lake acres for trophic status (see discussion under Section 314 reporting), and 14% for Aquatic Life Use Support. No lakes data were available for recreation use support assessment. Fish consumption use support assessment for lakes can be found in Part III of this report.

In 2009, MDEQ re-established the Ambient Lakes Monitoring Program as part of the Statewide Ambient Network. As part of the lakes monitoring, MDEQ focuses on monitoring public lakes and reservoirs. MDEQ collects samples from approximately 20 public lakes (greater than 100 acres in size) annually. Lakes are monitored for traditional physical, chemical, and biological water quality parameters using the protocol that was developed for nutrient criteria development. A list of these lakes can be found in MDEQ's Surface Water Monitoring Plan (2015).

Assessment Summary for ALUS Determinations

Aquatic life use support determinations for all lakes assessed for the 2016 §305(b) report were based upon comparison of measurements of specific chemical parameters (temperature, pH, dissolved oxygen, specific conductivity and total dissolved solids) to water quality standard values presented in the Assessment Methodology section of CALM, or compelling evidence of impairment of nutrient enrichment. Of the lakes assessed for ALUS, 82% were attaining, while 18% were not attaining and need a TMDL (Figure 7). Lakes needing a TMDL were determined to be impaired due to a primarily nutrients and organic enrichment/low dissolved oxygen (Figure 8).

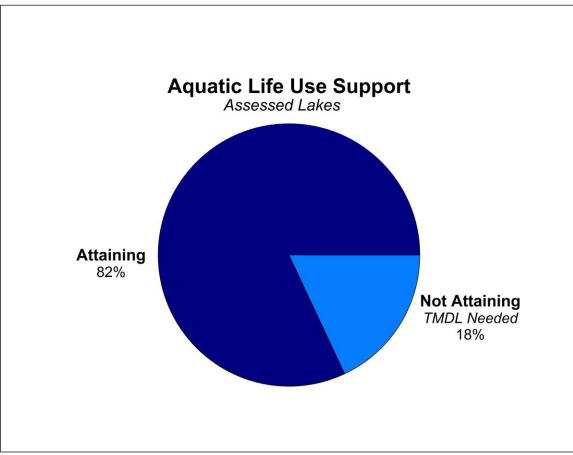


Figure 7: Aquatic Life Use Support Summary: Lakes

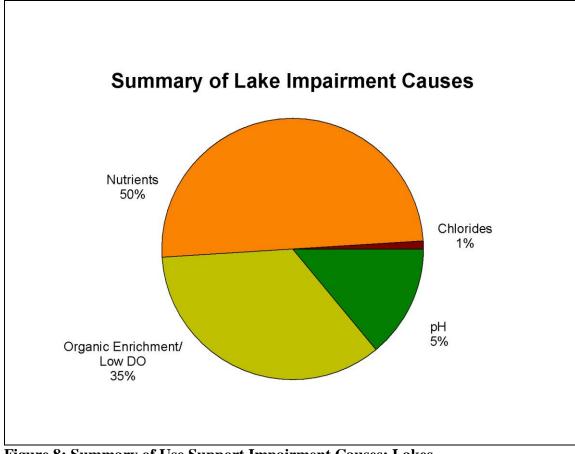


Figure 8: Summary of Use Support Impairment Causes: Lakes

Section 314 Reporting-Trophic Status

Section 314 of the Clean Water Act directs each state to prepare or establish the following: an identification and classification according to eutrophic conditions of all publicly-owned lakes in such state; a description of procedures, processes, and methods (including land use requirements), to control sources of pollution of such lakes; a description of methods and procedures, in conjunction with appropriate federal agencies, to restore the quality of such lakes; methods and procedures to mitigate the harmful effects of high acidity; a list and description of lakes for which uses are known to be impaired and an assessment of the status and trends of water quality in lakes.

Requirements such as these have led to the development of various indices that enable researchers to classify water bodies based on the amount of biological production that is occurring within that waterbody (Brezonik 1984, Carlson 1977). These indices vary in approach with respect to variables and their classification index range, but they are based on the same concepts: that the trophic state of a lake is an important component in determining the productivity of a waterbody; that an index can be useful in determining the trophic state of a waterbody; and that indicating whether it is suitable for fishing or swimming.

Trophic state is not synonymous with water quality. Although the terms are related, they should not be used interchangeably. Trophic state is a scale that describes the condition of a waterbody based on its productivity. The trophic scale is a division of variables used in the definition of trophic state and is not subject to change because of the attitude or biases of the observer (Carlson and Simpson 1996).

The most widely used index for classifying lake trophic status is Carlson's Trophic State Index (USEPA 2006). This index is based on the relationship that changes in nutrient levels cause changes in algal biomass which results in changes in lake clarity. Simply, it is a measure of a lake's trophic state from oligotrophy (very clear water, nutrient poor and with high dissolved oxygen year round) to eutrophy (more productive, more plant biomass and high nutrient level) (Carlson and Simpson 1996). Three variables are commonly used to calculate Carlson's Trophic State Index (TSI) for a lake: Secchi Depth; Chlorophyll a; and Total Phosphorus.

The TSI for each parameter is calculated according to the following formulas:

Secchi Depth: TSI = 60- [14.41 ln Secchi depth (meters)]

Chlorophyll a: TSI = [9.81 ln Chlorophyll a (ppb)]+ 30.6

Total Phosphorus: TSI = [14.42 ln Total Phosphorus (ppb)] +4.15 Table 8 shows the typical ranges of TSI scores and water quality parameters associated with the three trophic states of a lake.

		Secchi Depth Chlorophyll a		Total Phosphorus
	TSI	(m)	(ppb)	(ppb)
Oligotrophic	<39	>4	<2.6	<12
Mesotrophic	40-	2-4	2.6-7.2	12-24
	50			
Eutrophic	50-	<2	>7.2	>24
	110			

 Table 8: Carlson's Trophic State Index (Adapted from Addy and Green 1996).

Carlson's index was developed to be used with lakes that have few rooted aquatic plants and little non-algal turbidity.

Based on these assumptions, this index is not ideally suited for the majority of Mississippi lakes. However a literature review indicated that Carlson's index is the most commonly used trophic state assessment tool in the Southeast, and it appears to be the most appropriate index currently available.

These trophic assessments are based on data collected in during the 2010-2014 reporting window. The lakes were sampled a minimum of six times, once in the spring, once in the fall and four times during the summer.

Based on these data, the Carlson Index indicated that all but two of the lakes sampled were eutrophic. Bay Springs Lake in the Tombigbee Basin and Lake Mohawk in the North Independent Streams are mesotrophic. The TSI based on secchi depth seems to provide the best assessment of trophic status for Mississippi lakes. This could be due to the fact that nutrients in Mississippi often enter water bodies along with soil particles from agricultural fields or other runoff. Therefore, low secchi depth may also be correlated with increased nutrients and productivity. For example, lakes may be muddy during the spring and early summer months with limited light penetration preventing significant algal growth. However, as water clears later in the summer and fall, the available nutrients can cause rapid phytoplankton growth. The trophic status for each lake is provided in Table 9.

Clay, turbidity, and pH also affect the bio-availability of phosphorus. Low pH reduces the solubility while phosphorus binds onto the clay preventing it from dissolving efficiently into the water column (Reicke 2005, Oldham 2003, Greenwood and Earnshaw 2002). Thus, TSI for phosphorus may not be an appropriate variable to measure in Mississippi for use in this index.

Oligotrophy vs. mesotrophy vs. eutrophy is not a reflection of whether a waterbody is "good," "fair," or "poor" as different trophic states are suitable for different activities. An oligotrophic lake may be more desirable for swimming, whereas a eutrophic lake may be more desirable for fishing (Addy and Green 1996). An oligotrophic or a eutrophic

lake has attributes of production that remain constant regardless of the use of the water or where the lake is located (Carlson and Simpson 1996). Some lakes are naturally eutrophic, because trophic state is a reflection of a lake's physical condition. Size and shape of the lake, residence time, geology, soils and size of the watershed all play a role in trophic state. Additionally, man-made reservoirs tend to become eutrophic more rapidly than natural lakes, since there is a tendency for these reservoirs to revert back to their original states, typically a stream system or marsh. Natural eutrophication occurs over thousands of years; but human activities can accelerate the process by introducing fertilizers, pesticides and sediments (Addy and Green 1996).

Table 9: Carlson's Tropic Status of Lakes							
Basin	Lake	Carlson's TSI Status					
Big Black River	Lake Lorman	Eutrophic					
North Independent Streams	Horn Lake	Eutrophic					
North Independent Streams	Lake Mohawk	Mesotrophic					
Pascagoula River	Archusa Creek Water Park	Eutrophic					
Pascagoula River	Beaver Lake	Eutrophic					
Pascagoula River	Bonita Reservoir	Eutrophic					
Pascagoula River	Flint Creek Reservoir	Eutrophic					
Pascagoula River	Geiger Lake (Paul B Johnson	Eutrophic					
	State Park)						
Pascagoula River	Hennington Lake	Eutrophic					
Pascagoula River	Little Black Creek Reservoir	Eutrophic					
Pascagoula River	Long Creek Reservoir	Eutrophic					
Pearl River	Anchor Lake	Eutrophic					
Pearl River	Beaver Lake	Eutrophic					
Pearl River	Crystal Lake	Eutrophic					
Pearl River	Dixie Springs Lake	Eutrophic					
Pearl River	Lake Hide-A-Way	Eutrophic					
Pearl River	Ross Barnett Reservoir	Eutrophic					
South Independent Streams	Artonish Lake	Eutrophic					
South Independent Streams	Butler Lake	Eutrophic					
South Independent Streams	Fields Lake	Eutrophic					
South Independent Streams	Flatland Lake	Eutrophic					
South Independent Streams	Gillirad Lake	Eutrophic					
South Independent Streams	Hurricane Lake	Eutrophic					
South Independent Streams	Lake Copiah	Eutrophic					
South Independent Streams	Lake Mary	Eutrophic					
Tombigbee River	Aberdeen Lake	Eutrophic					
Tombigbee River	Bay Springs Lake	Mesotrophic					
Tombigbee River	Davis Lake	Eutrophic					
Tombigbee River	Lake Tom Bailey	Eutrophic					
Tombigbee River Loakfoma Lake		Eutrophic					
Tombigbee River	Pool C	Eutrophic					
Tombigbee River	Trace State Park Lake	Eutrophic					
Upper Mississippi River	Lake Chotard	Eutrophic					
Yazoo River	Arkabutla Lake	Eutrophic					
Yazoo River	Bailey Lake	Eutrophic					
Yazoo River	Bee Lake	Eutrophic					
Yazoo River	Chewalla Lake	Eutrophic					
Yazoo River	Desoto Lake	Eutrophic					
Yazoo River	Dump Lake	Eutrophic					
Yazoo River	Eagle Lake	Eutrophic					
Yazoo River	Eagle Lake (Little)	Eutrophic					
Yazoo River	Enid Lake	Eutrophic					
Yazoo River	Flower Lake	Eutrophic					
Yazoo River	Hard Cash Lake	Eutrophic					

Table 9: Carlson's Tropic Status of Lakes

Basin	Lake	Carlson's TSI Status
Yazoo River	Lake Beulah	Eutrophic
Yazoo River	Lake Bolivar	Eutrophic
Yazoo River	Lake George	Eutrophic
Yazoo River	Lake Henry	Eutrophic
Yazoo River	Lake Jackson	Eutrophic
Yazoo River	Lake Lee	Eutrophic
Yazoo River	Lake Washington	Eutrophic
Yazoo River	Lake Whittington	Eutrophic
Yazoo River	Long Lake	Eutrophic
Yazoo River	Lower Lake	Eutrophic
Yazoo River	Moon Lake	Eutrophic
Yazoo River	Mossy Lake	Eutrophic
Yazoo River	Roebuck Lake	Eutrophic
Yazoo River	Sixmile Lake	Eutrophic
Yazoo River	Snow Lake	Eutrophic
Yazoo River	Tchula Lake	Eutrophic
Yazoo River	Tunica Cutoff	Eutrophic
Yazoo River	Walnut Lake	Eutrophic
Yazoo River	Wasp Lake	Eutrophic

 Table 9: Carlson's Tropic Status of Lakes (Continued)

Lake Pollution Control Methods

There several state and local programs with oversight of pollution sources for lakes in Mississippi. Point sources are regulated by MDEQ through issuance and enforcement of NPDES permits ensuring that lake water quality complies with Mississippi's water quality standards. If an existing or proposed point source discharge is found to be detrimental to a lake's water quality, alternative discharge sites are investigated.

Nonpoint source pollution is the major source of pollution to Mississippi's lakes. Several lakes have been targeted for demonstration projects in the Nonpoint Source (NPS) Program. Mississippi's NPS Program has identified control measures to address nonpoint source problems and is working with the agencies and groups which will implement the measures.

Local units of government can play an important role in protecting lakes. Counties or municipalities may adopt land use ordinances or regulations that can be more effective than statewide programs in protecting lakes.

MDEQ's Wetlands Program also plays a role in protecting lakes. Wetlands serve as valuable fish and wildlife habitat, and as effective natural filters of pollutants entering streams and lakes. MDEQ strives to minimize wetlands losses around lakes. In addition, the creation or restoration of wetland acres is a measure to control NPS pollution entering lakes.

Mississippi 2016 §305(b) Water Quality Assessment Report

PART III PUBLIC HEALTH CONCERNS AND ADVISORIES

Public Health Concerns and Advisories

Introduction

Toxic pollutants and pathogenic organisms in our environment are a widespread and growing public concern. As MDEQ turns its attention more toward risk assessment and public health, levels of toxic pollutants and pathogens in water, sediment, and fish tissue become increasingly important.

Monitoring for toxins and bacteriological indicators of pathogens in surface waters is accomplished through several data collection activities by MDEQ as well as other state and federal agencies. MDEQ monitoring activities for toxicants and bacteria include water column, sediment, and/or fish tissue sampling from: ambient fixed station network program monitoring, emergency response to pollutant spills or discharges, hazardous waste program investigations, and special monitoring studies for pollutants of state, regional, or national environmental concern (e.g., mercury, dioxin).



Results from these monitoring activities may lead MDEQ and/or partnering other state agencies to issue public health advisories or restrictions on the use of affected water bodies when unsafe levels of pollutants are detected. In some cases, a "blanket" public health advisory may be issued as a general precaution for

areas where the pollutant(s) may impact a broad area, is pervasive, and/or the pollutant source is not readily controllable (i.e., atmospheric deposition of mercury). Monitoring of the affected geographic area is continued and expanded as necessary to ensure the public health advisory is maintained as long as warranted.

Fish Tissue Contamination

Most of the water bodies in Mississippi with elevated levels of toxicants have some form of the toxicant present in fish tissue. In addition, with one of the CWA goals being to maintain fishable waters and ensure attainment of fish consumption use, fish tissue monitoring and assessment are of primary importance in water quality management activities. Major fish toxicant issues currently under investigation by MDEQ include continued concern over pesticides in the Yazoo River Basin (Delta region) and mercury contamination in several areas of the state. To address these issues, as well as to monitor general status and trends in fish tissue contaminants, MDEQ maintains a comprehensive fish tissue monitoring program.

The Ambient Monitoring Network includes fish tissue sampling annually at a minimum of 25 stations across the state. These sites are rotated among the different waterbody types. Additional tissue sampling for fish kill investigations, monitoring of fish advisory areas, and for special studies is also conducted. The fish consumption advisories and commercial fishing bans presently in effect are listed in Table 10 and shown in Figure 9.

Table 10: Fish Tissue Advisories in Mississippi

MISSISSIPPI'S FISH TISSUE ADVISORIES AND COMMERCIAL FISHING BANS							
							July 2011
WATERBODY	CHEMICAL	DATE ISSUED	ACTION				
Little Conehoma Creek and Yockanookany River in Attala and Leake Counties. From Hwy 35 near Kosciusko, downstream to Hwy 429 near Thomastown	PCB's	June 1987	Consumption Advisory All Species Commercial Fishing Ban				
Lake Susie, Oxbow Lake of Old Tallahatchie River in Panola County west of Batesville.	PCB's	Nov. 1989	Same as above				
Escatawpa River from the Alabama state line to I-10.	Mercury	May 1995	Limit Consumption Advisory for largemouth bass and large catfish (>27 in.)*				
Bogue Chitto River, entire length in MS.	Mercury	May 1995	Same as above				
Yockanookany River, entire length.	Mercury	May 1995	Same as above				
Pearl River from Hwy 25 near Carthage, downstream to the Leake County Water Park.	Mercury	June 2001	Same as above				
Enid Reservoir	Mercury	May 1995	Same as above				
Yocona River from Enid Reservoir downstream to the confluence with the Tallahatchie River.	Mercury	Sept. 1996	Same as above				
Pascagoula River, entire length.	Mercury	Sept. 1996	Same as above				
Archusa Creek Water Park	Mercury	Sept. 1996	Same as above				
Grenada Lake and Yalobusha River from the dam downstream to Holcomb.	Mercury	June 2001	Same as above				
Mississippi Delta - all waters from the mainline Mississippi River Levee on the West to the Bluff hills on the East except where removed below.**	DDT, Toxaphene	June 2001	Limit Consumption Advisory for carp, buffalo, gar, and large catfish (>22 in.)****				
Gulf of Mexico	Mercury	May 1998	King Mackerel <33" - no limit, 33-39" limit consumption***, >39" - do not eat				

* The Mississippi State Health Department recommends that people limit the amount of bass and large catfish that they eat from these areas, because of high levels of mercury in the fish. Children under seven and women of child bearing age should eat no more than one meal of these fish every two months. Other adults should eat no more than one meal of these fish every two weeks.

** Steele BayouBlack Bayou Bee Lake Recon Lake Lake Charlie Capps

*** The Mississippi State Health Department recommends that people limit the amount of 33-39" King Mackerel they eat from the Mississippi Gulf Coast. Children under seven and women of child bearing age should eat no more than one meal of these fish every two months. Other adults should eat no more than one meal of these fish every two weeks.

****The Mississippi State Health Department recommends that people limit amount of carp buffalo, gar and large catfish from these areas, because of high levels of DDT and Toxaphene in the fish. Adults should eat no more than 2 meals per month.

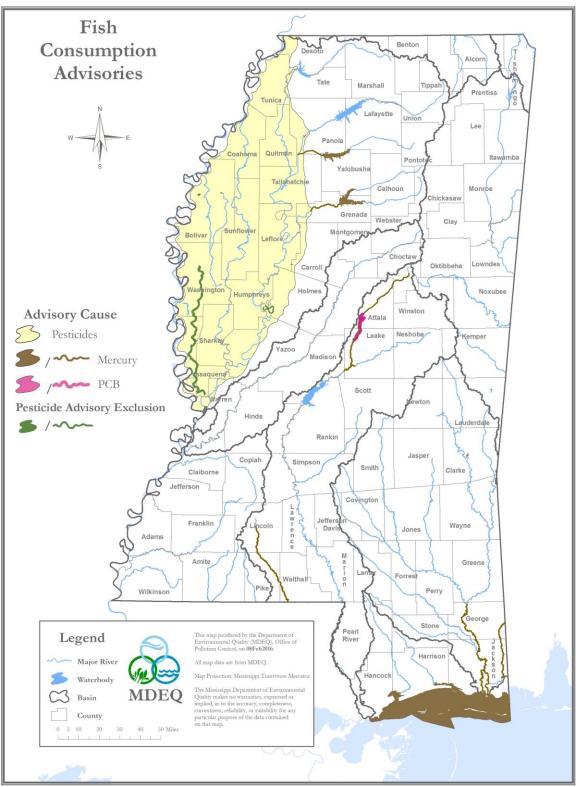


Figure 9: Map of Fish Advisories in Mississippi

Mercury Contamination in Fish Tissue

The presence of mercury in fish tissue continues to be an issue of concern to MDEQ. The agency continues to commit resources to determining the status of mercury contamination in Mississippi's waters. Mississippi currently has 14 water bodies under fish consumption advisories for mercury including the Gulf of Mexico. The advisories are for the larger predator species such as largemouth bass and large catfish in freshwater systems and king mackerel in the Gulf.

Current monitoring efforts are targeting additional species of different trophic levels within existing advisory areas. This includes species such as bluegill, crappie, buffalo and smaller catfish. Additional marine species are also being sampled.

The information gained from additional species is important because historical monitoring efforts have focused on the predator species which were known to have the highest concentrations. However, new health effects studies indicate that mercury may be harmful at lower levels than previously believed, so additional data on species with lower mercury concentrations are now critical. Additional data on marine species are important for the same reasons. Most of the existing data are for king mackerel.

Several other efforts are underway in Mississippi to address the issue of mercury in fish. The Pat Harrison Waterway District is liming Archusa Creek Reservoir in an effort to improve the water quality for fish production and to evaluate its effectiveness in reducing mercury levels. MDEQ FSD is analyzing fish and sediment samples in support of the project. Also mercury TMDLs for the Escatawpa and Bogue Chitto Rivers and for Enid Reservoir and the Yocona River have been completed.

DDT Contamination in the Delta

DDT contamination in the Mississippi Delta has been a concern ever since the harmful effects of pesticide contamination first became a national issue. DDT was banned for use in Mississippi in 1972; and, although DDT concentrations in fish tissue have decreased ten-fold since that time, levels remain among the highest in the nation.

The Mississippi Fish Advisory Task Force was convened in 2000 to address the protection of those who routinely consume fish from the Delta. The task force consisted of scientists, engineers, and medical doctors from MDEQ, Mississippi Department of Health, Mississippi Department of Agriculture and Commerce, Mississippi Department of Wildlife, Fisheries and Parks, and Mississippi Department of Marine Resources. This group is charged with developing criteria for issuing fish consumption advisories for Mississippi. With input from a Technical Advisory Group made up of experts outside of state government in the fields of toxicology and aquatic biology, the Task Force developed new risk based criteria for DDT, toxaphene and PCB's. A complete report on the process is provided in the document Fish Advisory Criteria For Organochlorine Compounds (Mississippi Fish Advisory Task Force, 2001).

Concurrent with this criteria development, MDEQ began collecting new fish tissue data from the Delta. MDEQ collected fish tissue samples from ten sites located on four lakes and five rivers or bayous in the Mississippi Delta Region of Mississippi. The data from the 2000 study were evaluated along with existing fish tissue data from MDEQ's 1999 Ambient Monitoring Program to determine the need for advisories in the Delta. The data indicated that all ten sites and all nine water bodies sampled in the study warranted some type of advisory. Based on this information, the task force recommended a regional advisory for the Delta (Figure 10), rather than a patchwork of discrete advisories for each of the ten sites. The data from this study support previous data collected by MDEQ and other agencies, which indicate that these pesticide concentrations were common for this part of the state.

On June 26, 2001, MDEQ issued an advisory for the Delta region of Mississippi. This advisory recommended that people limit the amount of carp, buffalo, gar, and large catfish (catfish larger than 22") they eat to no more than two meals per month. This advisory applies to the entire Delta from Memphis to Vicksburg, from the Mississippi River Levee on the west to the bluff hills on the east. The advisory includes all natural waters including lakes, rivers, bayous and sloughs.

In addition, for Roebuck Lake in Leflore County, the advisory recommends that people do not eat buffalo from this waterbody. In August 2001, MDWFP issued a commercial fishing ban for Roebuck Lake.

The Delta advisory, which is still in effect today, does not apply to the Mississippi River or the river-connected oxbow lakes located west of the Mississippi River Levee. These lakes rise and fall each year with the Mississippi River and are flushed out regularly. Perhaps more importantly, the periodic flooding of these areas has made them less desirable for row cropping and therefore there has been less historical application of these now banned pesticides. The advisory also does not apply to bass, bream, crappie, freshwater drum and smaller catfish (catfish < 22" in length), nor does it apply to farm raised catfish. A complete report on this study is available in the document Mississippi Delta Fish Tissue Study 2000, Final Report (MDEQ 2001).

In July of 2011, the Fish Tissue Task Force modified the Delta Fish Tissue Advisory. The following waterbodies were removed from the Delta Fish Advisory:

Steele Bayou (Issequena, Sharkey, Warren and Washington Counties) Black Bayou (Washington County) Bee Lake (Holmes County) Recon Lake or Rainey's Lake (Bolivar County) Lake Charlie Capps (Bolivar County)

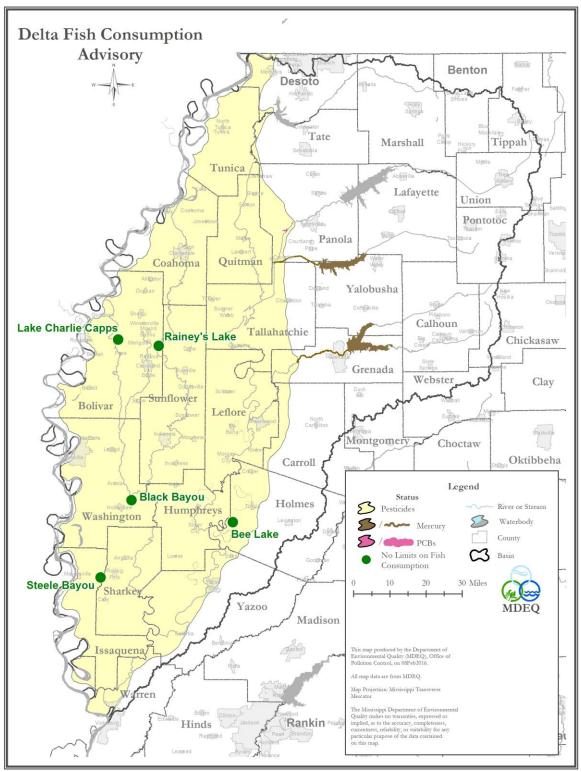


Figure 10: Advisory Area for Delta Region of Mississippi

Other Toxicants in Fish Tissue

In addition to the pesticides, mercury and ambient monitoring described above, MDEQ investigated several additional water bodies for contaminants in fish. The two primary chemicals of concern have been PCBs and dioxin. Dioxin concentrations in Mississippi fish have declined markedly over the last decade, primarily as a result of changes in the bleaching process in the paper industry. The dioxin advisory on the Leaf River, which originated in 1989, was removed in 1995. Dioxin concentrations in the Escatawpa River declined as well, and the Limit Consumption Advisory for fish was removed in 1996. MDEQ continues to monitor fish from the Leaf River near New Augusta and the Tenn-Tom Waterway near Columbus to confirm that these concentrations remain low. In addition, in 2001, MDEQ removed the fish advisory on Country Club Lake near Hattiesburg, originally issued in 1990, after multiple samplings showed dioxin levels declined in that waterbody.

PCBs continue to be a concern in industrial areas and around natural gas compressor stations. MDEQ continues to sample fish in the vicinity of existing advisories on the Yockanookany River in Attala County and Lake Susie in Panola County, and these advisories remain in effect.

Fish Kills

From January 2010 through December 2014, the MDEQ investigated 43 fish kills (Figure 11). Thirty-five percent of these were associated with low dissolved oxygen levels and other natural causes (Figure 12). Twenty-eight percent were those related to nutrient overloads, sewage spills or un-permitted discharges. In 12% percent of the investigations the cause could not be determined.

The leading cause of kills was attributed to natural causes such as low dissolved oxygen, in those cases the cause was listed as "low D.O./natural". In some of the fish kills investigated the fish had deteriorated to the point that the cause was difficult or impossible to discern. When the cause could not be determined, the kill was categorized as"unknown".

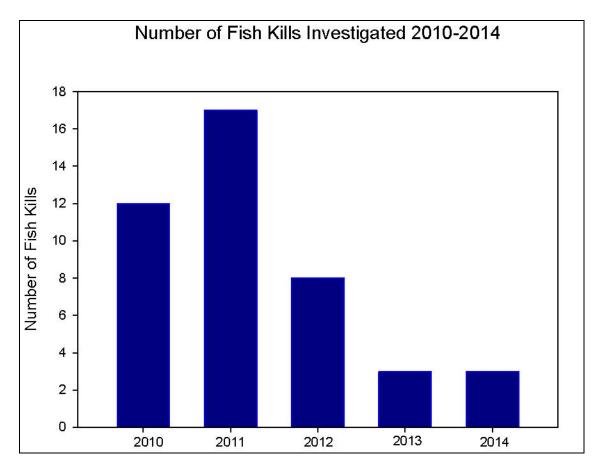


Figure 11: Annual Number of Fish Kills Investigated from 2010-2014

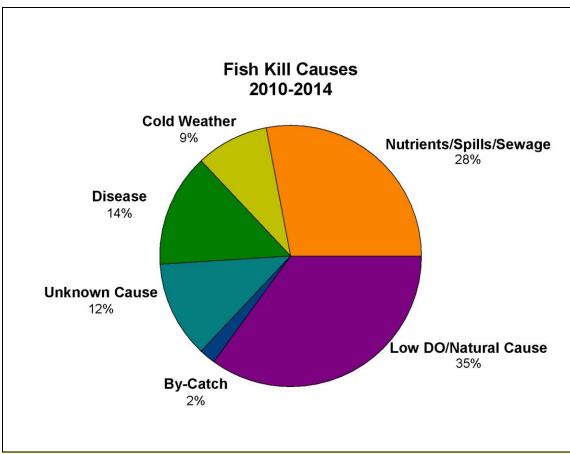


Figure 12: Distribution of Fish Kill Causes from 2010-2014

Shellfish Restrictions

The National Shellfish Sanitation Program (NSSP), administered by MDMR, opens and closes shellfish harvesting areas according to a classification system for the coastal waters of Mississippi. For current status of the classifications and maps of these waters, visit the MDMR web site (www.dmr.state.ms.us).

Most of the major shellfish harvesting areas in Mississippi waters are routinely classified as either "conditionally approved" or "restricted". The restrictions are due primarily to the effects of nonpoint source pollution from urban runoff and unsewered communities. Studies by MDMR of fecal coliform data, the indicator utilized by the NSSP, have historically shown wide fluctuations in fecal counts (MPN) due to rainfall and/or high river stages. This continues despite significant improvements in wastewater treatment and collection systems in the coastal area. These fluctuations are likely a result of private septic systems and other nonpoint pollution sources located in watersheds that drain into these waters. When coliform levels exceed water quality standards, oyster harvesting is halted by MDMR until approved conditions are met.

For some coastal waters, the restriction or prohibition classification is based solely on geographic location (i.e., proximity to a shoreline or NPDES-permitted wastewater

discharge points where human contamination of shellfish beds is more likely) regardless of the fecal coliform levels measured. Due to this "semi-permanent" condition unrelated to actual water quality data, according to the MDEQ CALM (MDEQ 2016), these water bodies will not be assessed. For the 37 sq. miles of shellfish harvesting areas, TMDLs have already been developed for 28 sq. miles that were assessed as not attaining the shellfish harvesting use in 2004. These estuarine water bodies are periodically impacted by urban nonpoint source runoff and failing septic tanks.

Because of hurricane damage sustained in 2005, all shellfish beds were closed for 2006. They remained closed until 2010. In 2010, shellfish beds were closed in response to potential oiling from the MC-252 Deepwater Horizon incident. The Shellfish Harvesting Use was not assessed for this report due to the shellfish bed replenishment underway after the destruction of beds from Hurricane Katrina, as well as closures in response to the oil spill. Shellfish harvesting beds were reopened for some limited harvesting in 2012. For current information about shellfish harvesting areas, please contact MDMR's <u>Shellfish Bureau</u>.

Beach Advisories

Sampling for enterococci bacteria and chemical water quality parameters occurs weekly to monthly along the entire length of Mississippi's Gulf Coast public beaches at a total of 22 stations. Results from the sampling and information on the program are readily available to the public on a web site developed for the program. The web site is accessible through MDEQ's web site (<u>http://opcgis.deq.state.ms.us/beaches/</u>).

In 2000, USEPA amended the Clean Water Act through the BEACH (Beaches Environmental Assessment and Coastal Health) Act to require all states to add more stringent sampling and public notification requirements to their water quality programs. MDEQ's Beach Program already met the federal requirements with the exception of the formal adoption of enterococci bacteria as the new bacterial indicator in the state's water quality standards (WQS). Enterococci criteria were adopted into the Mississippi WQS in 2007.

For the period 2010 – 2014, the Mississippi Beach Monitoring Task Force issued 188 advisories or closures resulting from high bacteria levels, hurricane debris or renourishment projects. The cause of most of these advisories was urban runoff following storm events; however, several were caused by sewer leaks, spills or breaks.

PART IV SURFACE WATER MONITORING AND ASSESSMENT PROGRAM SUMMARY

Basin Management Approach

Mississippi's plan for achieving comprehensive, statewide assessment of its surface waters involves coordination of various levels of MDEQ surface water monitoring activities and data sharing with other monitoring agencies using the agency's Basin Management Approach. Mississippi's Basin Management Approach is a process to conduct comprehensive water quality planning and to foster implementation of practices that will result in water quality protection on a basin wide scale. This approach recognizes the interdependence of water quality on the many related activities that occur in a drainage basin. Some of these activities include monitoring, assessment, problem identification, problem prioritization, planning, permitting, water use, and land use. These activities are integrated by basin and result in watershed management plans and implementation strategies that serve to focus on water quality protection efforts.

The purpose of Mississippi's Basin Management Approach is to restore and protect the quality of Mississippi's water resources by developing and implementing effective management strategies that address water quality issues while fostering sound economic growth. The majority of water quality management activities in Mississippi are now based on a repeating multi-year management cycle.

MDEQ initiated the basin management approach to manage its water programs on a basin wide scale. These basins serve as the hydrological boundaries that guide MDEQ's water quality activities. The waters of Mississippi are divided into nine major drainage areas or basins. These nine basins are the Big Black River Basin, Coastal Streams Basin, North Independent Streams Basin, Mississippi River Basin, Pascagoula River Basin, Pearl River Basin, South Independent Streams Basin, Tennessee River Basin, Tombigbee River Basin, and Yazoo River Basin. The boundaries for each basin are shown in Figure 13.

Through this approach, Mississippi's ten drainage basins have been placed into four basin groups, allowing all of the basins to receive equal focus. Each of these basin groups is configured to represent approximately one-fourth of the state. Figure 14 depicts the four basin groups. The Basin Management Approach strategy is supported by various water quality monitoring activities that take place as part of the program support monitoring conducted by MDEQ and other resource partners that augments the statewide ambient monitoring network with supplemental monitoring sites in the large drainage basins. One objective of program support monitoring is to increase the total coverage of waters monitored in Mississippi and fill data gaps identified in the planning phase of the basin cycle. Concentrating monitoring and assessment resources in specific drainage basins maximizes sampling efficiency to achieve this objective and enhances collaboration among participating resource agencies.

Supplemental watershed monitoring takes place during the data gathering phase of the basin management cycle and during pre and post-implementation monitoring associated with §319 Nonpoint Source funded watershed implementation projects. These monitoring efforts involve sampling of multiple parameters (water chemistry, bacteria, algae, fish, benthic macroinvertebrates and/or sediment) needed to address watershed data collection needs.

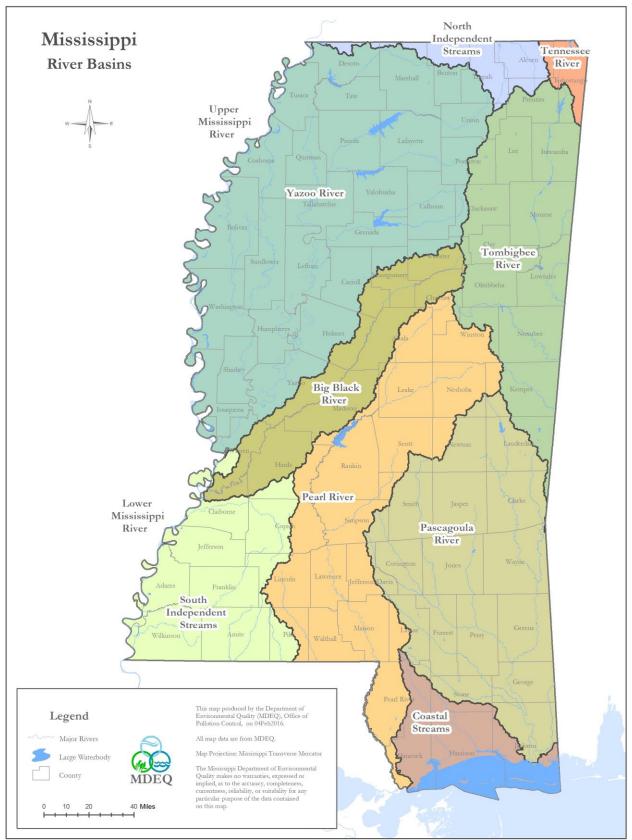


Figure 13: Mississippi's Nine Major Drainage Basins

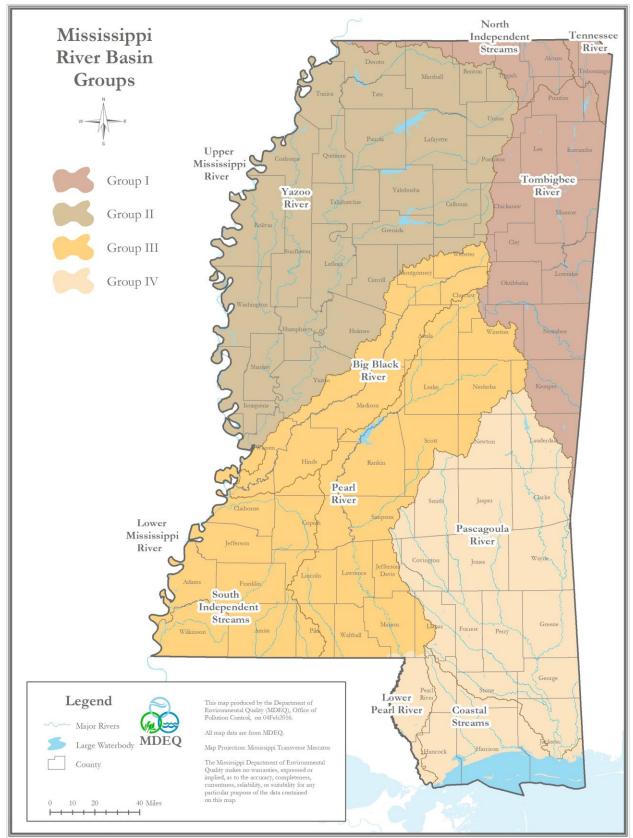


Figure 14: Mississippi's Basin Groups

MDEQ Surface Water Monitoring Program Introduction

Surface water monitoring activities provide the foundation for assessment of the water quality condition in Mississippi's waters. Without monitoring data and information, the state's water quality management and regulatory programs cannot accurately and effectively report on the status of the state's water resources, identify and solve problems, characterize water pollution causes and effects, and/or evaluate the overall effectiveness of state management regulatory actions.

MDEQ's Office of Pollution Control (OPC) is the state agency responsible for the conservation of the quality of the natural resources of Mississippi and has primary responsibility for providing an effective statewide surface water monitoring and assessment program. This responsibility, coupled with legislative mandates set forth by the Mississippi Air and Water Pollution Control Law (Sections 49-17-1 to 49-17-43) and the Federal Clean Water Act (Sections 106, 204, 303, 305, and 314), serves as the main purpose for development and implementation of the Surface Water Monitoring Program (SWMP). Other state and federal government agencies and public/private groups are also involved in monitoring surface water quality. These other monitoring organizations include the United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Tennessee Valley Authority (TVA), United States Environmental Protection Agency (USEPA), National Oceanic and Atmospheric Administration (NOAA), Mississippi Department of Marine Resources (MDMR), Mississippi Band of Choctaw Indians, University of Southern Mississippi Gulf Coast Research Laboratory (GCRL), United States Department of Agriculture (USDA) National Sedimentation Laboratory, USDA Forest Service, USDA Natural Resource and Conservation Service, United States Fish and Wildlife Service (USFWS), Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP), as well as other federal, state and local agencies, research institutions, universities, and private groups. MDEQ actively solicits their contribution of information to the evaluation and assessment of Mississippi waters. This is accomplished through the use of the agency's Basin Management Approach in which the various state, federal, and private representatives partner with MDEQ in this water management planning process.

Surface Water Monitoring Strategy

In order to successfully develop, implement, and maintain a surface water monitoring program, a strategy is necessary to steer and guide the broad range of multi-faceted monitoring activities carried out in support of program objectives. MDEQ's SWMP strategy, *State of Mississippi Surface Water Monitoring Program Strategy for Fiscal Years 2016-2018* (MDEQ 2015) can be provided upon request.

MDEQ's main reporting avenue for SWMP data is through the §305(b) Water Quality Assessment Report. In addition to the §305(b) Report, MDEQ provides a list of all impaired water bodies without TMDLs required under §303(d) of the CWA. Upon being reported on the §303(d) list, a Total Maximum Daily Load (TMDL) is developed for the cause(s), and strategies for restoring the waterbody back to attaining its designated use(s) are developed. When the TMDL has been completed or monitoring data show that the waterbody is no longer impaired, the waterbody is taken off the §303(d) list. The State's 2016 §303(d) List is also available from the MDEQ web site (www.deq.state.ms.us).

MDEQ also reports on SWMP activities and water quality issues through various other EPA-required reports. These include annual reporting of summary activities and individual projects for various EPA CWA grants, (i.e., §104(b), §106(e), §205(j), §319, §406(b)), and surface water programs (i.e., WQS, TMDL, NPDES, Basin Approach, Beach Monitoring). Reporting formats are presented in project/program-specific technical reports, brochures, posters, oral presentation, newspaper articles and MDEQ Internet access. Data generated are uploaded to national databases (i.e., EPA STORET/WQX) for the purpose of stakeholder outreach, education, public information, and to meet other federal grant and/or state legislative requirements. Additionally, MDEQ responds to individual requests from phone, web, or personal inquiries for water quality data and information.

Mississippi's current Plan for Nutrient Criteria Development was submitted to July 2010 and was mutually agreed upon with EPA Region IV in October 2010. The purpose of this plan was to provide EPA with a better understanding of Mississippi's approach to numeric nutrient criteria development. The focus of this strategy will be to develop nutrient criteria based primarily on the linkage between nutrient concentrations and the impairment of designated uses. Conceptually, three forms of nutrient criteria are defined and include: 1) causal and/or response variables expressed as numerical concentrations and/or mass quantities or loadings; 2) causal and/or response variables expressed as narrative statements with a translator mechanism to derive or calculate numerical concentrations and/or mass quantities or loadings; and 3) causal and/or response variables expressed as narrative statements only. The causative variables may include phosphorus and/or nitrogen and response variables may include chlorophyll *a* and turbidity.

Mississippi is applying a multiple lines of evidence approach to the development of numeric nutrient criteria. Potential criteria values are being developed by applying various criteria development methods including a reference condition approach, an effects-based approach, scientific literature, and mechanistic modeling. Potential criteria values are established for every method in which sufficient data are available. The multiple lines of evidence approach will be used for each of the state's waterbody types including: 1) non –Delta lakes, reservoirs, and oxbows, 2) coastal waters and estuaries, 3) non-Delta streams, and 4) Delta waters.

Currently, MDEQ plans for non-Delta lakes and reservoirs to be the first water bodies on our proposed schedule, aiming for a public notice date in the summer of 2016. Criteria development efforts will continue with the other waterbody types in a sequential manner. MDEQ is currently working on a revision to the MS Nutrient Criteria Development Plan which will include a new timeline and updated information for each waterbody type. Data collection and analysis continue to be conducted in order to derive protective numeric nutrient criteria for Mississippi's waters.

Description of MDEQ Sampling Networks

Monitoring information from multiple programs is needed to fully achieve a comprehensive understanding of water quality in Mississippi's surface waters. Routine ambient, program support, and special project monitoring activities administered by MDEQ contribute information for the evaluation and assessment of water quality in Mississippi. While all of these monitoring efforts contribute information for use in the \$305(b) Water Quality Assessment Report, the ambient monitoring networks serve as the foundation for the statewide water quality assessment process.

Status & Trends Ambient Monitoring Networks

In Mississippi, ambient monitoring is designed to characterize and assess statewide water quality status and trends in the state's streams, lakes, estuaries and coastal waters for general reporting in the §305(b) Water Quality Assessment report. Subsequently, waters identified as impaired are placed on the state's §303(d) list. Ambient monitoring also supports the design and implementation of MDEQ's surface water management programs including NPDES, non-point source, water quality standards, TMDL development, basin initiatives and water quality planning/management. This type of monitoring is also used by MDEQ to evaluate program effectiveness and to address economic development interests and concerns.

Ambient Monitoring Network stations are distributed throughout the northern, central, and southern regions of the state in streams, rivers, bayous, and estuaries. These stations are located to establish baseline conditions and in streams below critical discharges to establish long-term trends and/or observe improvements where pollution control measures are implemented. Streams representing a composite of a large watershed allow broad evaluations of overall abatement programs and waters of general concern (i.e., major streams entering or leaving the state and near-coastal waters).

To be included in Ambient Monitoring Networks, each station not only must meet the monitoring objectives of the program but also must meet specific selection criteria for station locations. The specific criteria utilized for the location and establishment of ambient stations are: major perennial stream; major lake or estuary; at or close to a hydrological recording station (required for most physical/chemical stations); strategic watershed location (lower end of watershed, confluence of major streams, mouth of major tributary, maximum spatial coverage, etc.); high recreational activity or designated use; interstate waters; waters of some ecological, public health, or economic significance (below major pollution sources, fish advisory area, ecoregional reference site, high quality waters, endangered/threatened species, high economic interest, etc.); and other logistical and administrative criteria (safety, accessibility, multi-agency coordination, historical data record).

Ambient Bridge Network

The Ambient Bridge Network design is conventional (i.e., targeted). Each station is required to meet the monitoring objectives and selection criteria for station locations. The network of statewide stations was established for systematic water quality sampling at regular intervals and for uniform parametric coverage to monitor water quality status and trends over a long-term period. Sampling is carried out by MDEQ FSD scientists from each of three regional offices (northern, central, and southern regions). Each office is responsible for the stations in its region and there are currently 10 stations per region for a total of 30 stations statewide. Laboratory analyses for the samples are carried out by MDEQ's laboratory located in Pearl, Mississippi. Several stations in the sampling network are historical stations that have monitoring dating back to the 1970's. Figure 15 shows the locations of the bridge stations.

Ambient Fish Tissue Monitoring Networks

Ambient Fish Tissue Monitoring Network consists of sampling at a minimum of 25 stations annually across the state. These stations are rotated through the different waterbody types. Fish tissue sampling for fish kill investigations, monitoring of fish advisory areas, and special studies requires more resources and results in more intensive monitoring than ambient fixed station network sampling. Fish samples are normally collected from early spring through fall



depending on ambient conditions. Target species include one predator or carnivore, such as flathead catfish or largemouth bass, and one bottom feeder or omnivorous species, such as channel catfish or smallmouth buffalo. Ideally, fillet composite samples consisting of five individuals are analyzed where all fish in the composite are at least 75% of the weight of the largest fish in the composite. The MDEQ laboratory has the capability to analyze fish tissue samples for approximately 36 organic compounds, PCBs, PCP, and 7 heavy metals.

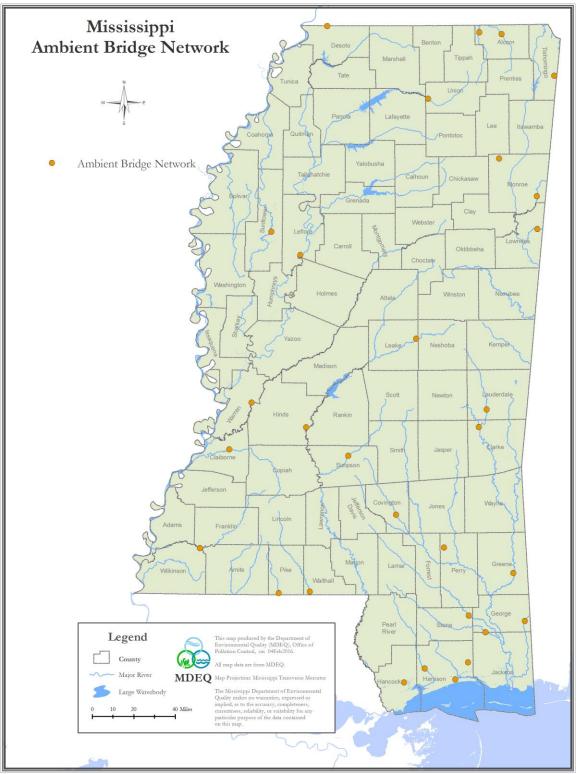


Figure 15: Ambient Bridge Network

Ambient Biological Network

In addition to extensive water chemistry and fish tissue analyses, the MDEQ relies heavily on the use of biological indicators to determine attainment status. The purpose of ambient biological monitoring is to assess the health or biological integrity of the aquatic community as a long-term indicator of stream water quality. The MDEQ Ambient Biological Monitoring Program collects benthic macroinvertebrate community surveys in wadeable freshwater streams and chlorophyll *a* levels in lentic, marine and estuarine waters.

In 2001, MDEQ updated the biological monitoring methodology in response to §303(d) issues and workloads. This initiative led to the development of a Mississippi-calibrated Index of Biological Integrity (IBI) *Development and Application of the Mississippi*

Benthic Index of Stream Quality (M-BISQ) (MDEQ 2003b) for use in assessment of wadeable streams in Mississippi and resulted in monitoring efforts that have greatly increased the number of biological assessments conducted on state waters. The Mississippi Benthic Index of Stream Quality (M-BISO) and the established sampling and analytical methodology contained therein now serves as the foundation for routine biological monitoring in MDEQ statewide Ambient



Monitoring Network. In 2015, the M-BISQ was recalibrated using data and information collected from 2001-2012. The recalibration report, *Evaluation and Recalibration of the Mississippi Benthic Index of Stream Quality (M-BISQ)* (MDEQ 2016), is available upon request. Figure 16 shows the M-BISQ where data were collected in 2010-2014.

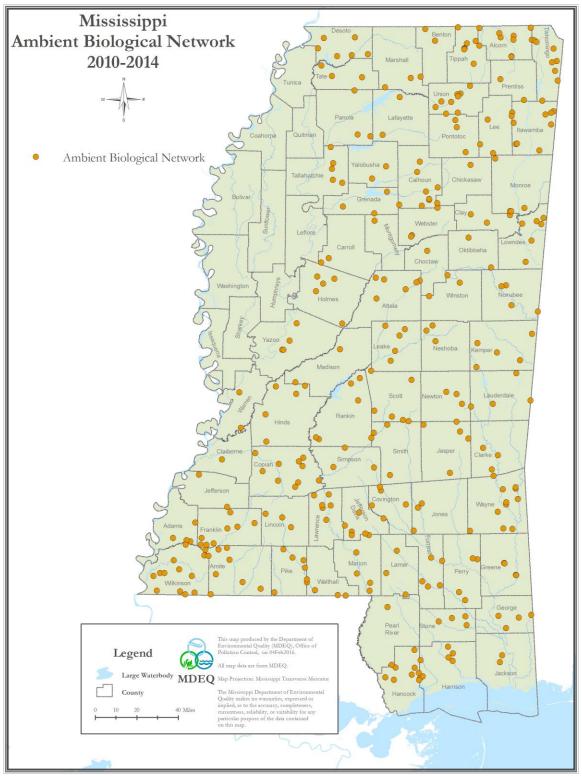


Figure 16: Ambient Biological Network

Ambient Recreational Monitoring Network

MDEQ maintains a monitoring network for flowing waters in the state that are used for primary contact recreation. A listing of these waters can be found in Mississippi's WQS. These sites are located on the recreational water bodies to monitor fecal coliform for the safety of Mississippi citizens that use these waters for recreational purposes. Monitoring is done at these locations in order to collect 5 samples within a 30-day period. This sample frequency allows for the calculation of a geometric mean for the fecal coliform data. Each location is monitored in both the contact (May-October) and non-contact (November-April) seasons. Figure 17 shows these monitoring locations.

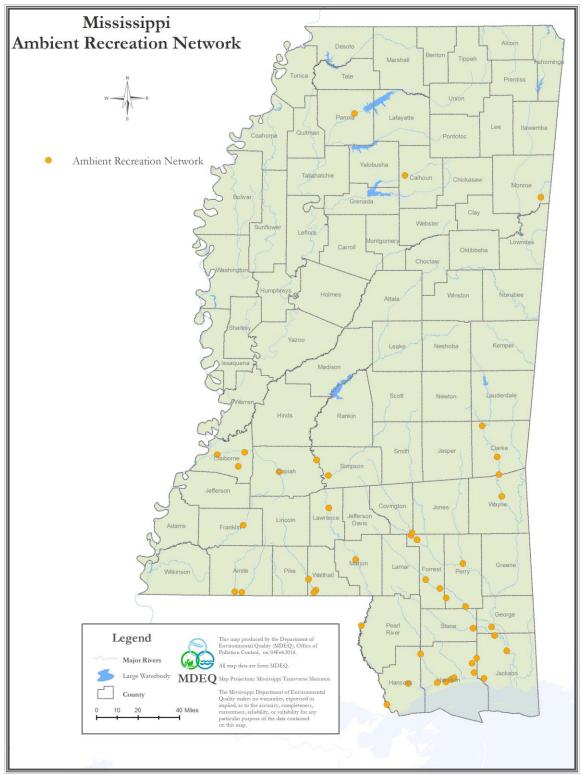


Figure 17: Ambient Recreational Monitoring Network

Ambient Beach Monitoring Network

MDEQ's Ambient Beach Monitoring Program, conducts routine bacteria and water chemistry sampling at 22 beach stations located along Mississippi's Gulf Coast (Figure 18). MDEQ is just one partner within a multi-agency Beach Monitoring Task Force composed of the EPA Gulf of Mexico Program, the Mississippi Department of Marine Resources, and the Mississippi State Department of Health. This Beach Monitoring Task Force oversees the program and issues beach advisories when needed.

MDEQ and the Beach Monitoring Task Force rely on data collected under this program to assess health safety issues for users of Mississippi's recreational beaches. When enterococci bacteria concentrations reach unsafe levels, beach advisories are issued. In addition. the monitoring data provide information concerning the seasonal water quality conditions of the immediately accessible waters along the public bathing beaches. Beach water quality conditions are made available to the public via a Beach



Monitoring Web (<u>http://opcgis.deq.state.ms.us/beaches/</u>). This web site contains beach advisory statuses, location of monitored sites, data associated with those monitored locations, and a history of beach advisories.

There are 22 beach monitoring stations that are sampled weekly. Any station is resampled if enterococci bacteria levels exceed 104 colonies/100ml

Mississippi Coastal Assessment Program

Through the establishment of the Mississippi Coastal Assessment Program (MCA), MDEQ has continued to coordinate the sampling effort that was initiated as part of USEPA's National Coastal Assessment (NCA) monitoring. This monitoring builds upon the data generated through NCA by using the same probabilistic station selection process and collecting data at 25 sites annually. MDEQ's MCA program monitors the core ecological indicators established by the NCA program. Figure 19 depicts all of the monitoring locations that have been sampled for 2010-2014.



Mississippi 2016 §305(b) Water Quality Assessment Report

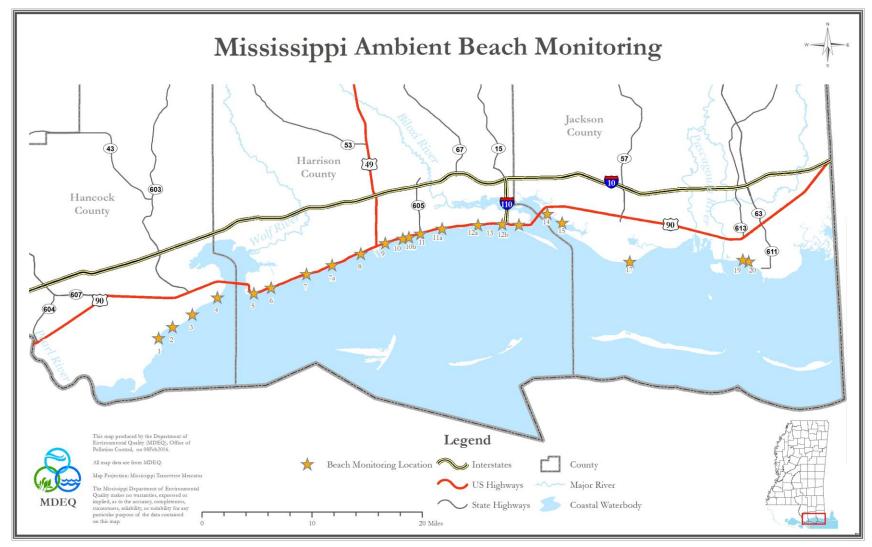


Figure 18: Ambient Beach Monitoring Network

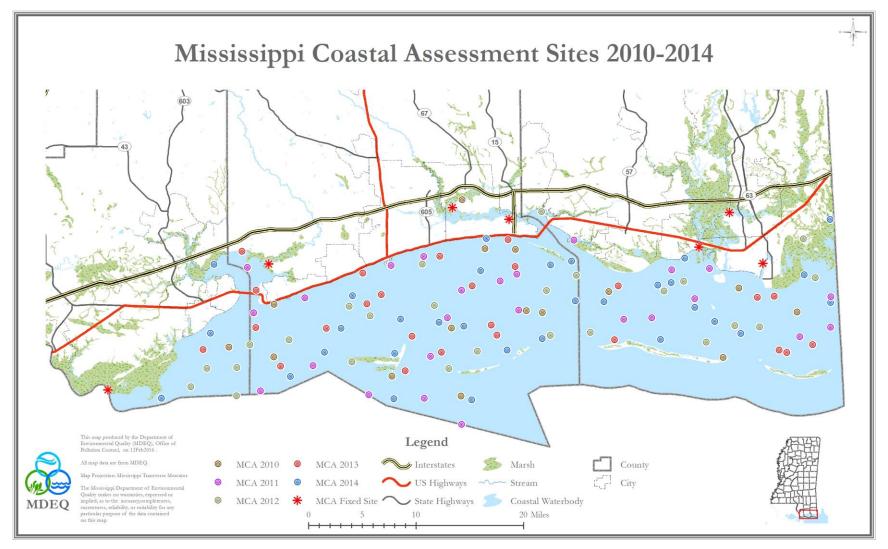


Figure 19: Mississippi Coastal Assessment 2010-2014

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Appendix A State of Mississippi Individual Waterbody Assessments 2016 Section 305(b) Report

Introduction

MDEQ manages its surface water programs on a river basin scale and has established a process that coordinates the water assessment and management activities of numerous state and federal agencies. This process, the Mississippi Basin Management Approach, is responsible for the development of and recurring updates to, basin management plans for Mississippi's major river basins. This appendix provides water quality assessment information specific to each of the state's major river basins. The information in this appendix is strictly a representation of the statewide §305(b) assessments broken down by river basin.

Hydraulically, the waters of Mississippi are divided into ten major drainage areas or river basins. These ten basins are the Big Black River Basin, Coastal Streams Basin, Mississippi River Basin, North Independent Streams Basin, Pascagoula River Basin, Pearl River Basin, South Independent Streams Basin, Tennessee River Basin, Tombigbee River Basin and Yazoo River Basin. For MDEQ management purposes, the Mississippi River Basin has been divided into upper and lower portions. The upper portion has been grouped with the Yazoo River Basin and the lower portion has been grouped with the South Independent Streams Basin.

In the following sections, surface water quality assessment data are presented in the form of an alphabetical listing of all individual waterbody assessments made for the 2010 §305(b) report. With each waterbody entry, pertinent information regarding waterbody ID number, reach location, assessed use, assessment status and numeric category designation are shown. This table also provides the necessary information to cross-reference §305(b) assessments with the 2016 §303(d) list. It should be noted that the assessment information provided in the detailed listing is accurate as of April 1, 2016, which may be different from the 2016 §303(d) list.

The integrated assessment guidance from USEPA allows segments to be assigned to one of five categories at the designated use level. This results in water bodies with multiple uses that often have multiple categories. This categorization system assigns a waterbody to one of five categories by use:

- Category 1: Attaining all uses
- **Category 2**: Attaining some uses but insufficient information for assessment of other uses.
- Category 3: Insufficient information to assess any use
- Category 4: Not attaining a use but a TMDL is not necessary
- Category 5: Not attaining a use and a TMDL is needed.

USEPA defines a Category 1 water as having sufficient data to prove there is no impairment for any potential designated use of that waterbody. Since Mississippi rarely has data for all designated uses on a specific waterbody, Mississippi currently has no water bodies assigned to Category

	BIG E	BLACK RIVER				
WATERSHED NAME ASSESSME	ENT UNIT § 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
ATWOOD CREEK 103012	N/A	Aquatic Life	e Support	11/16/15	Attaining	2
LOCATION: NEAR KOSCIUSKO FROM HEADWA	TERS TO MOUTH AT APOOKTA CREEK					
BAKERS CREEK 109211	109211	Aquatic Life	e Support	11/16/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUENCE WITH FLEETW CREEK	OOD CREEK TO CONFLUENCE WITH F	OURTEEN MILE				
BIG BLACK RIVER 107811	N/A	Aquatic Life	e Support	11/30/15	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH BEAR CH	REEK TO CONFLUENCE WITH CLEAR C	CREEK				
BOGUE CHITTO CREEK 107111	MS436E	Aquatic Life	e Support	11/16/15	Not Attaining, Tmdl Compl	eted 4A
LOCATION: FROM CONFLUENCE WITH LIMEKIL	N CREEK TO MOUTH AT BIG BLACK R	RIVER				
CALABRELLA CREEK 101111	N/A	Aquatic Life	e Support	11/16/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO MOUTH AT	f BIG BLACK RIVER					
COX CREEK 107612	MS437E	Aquatic Life	e Support	11/16/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO MOUTH AT	PORTER CREEK					
DOAKS CREEK 105411	N/A	Aquatic Life	e Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE WITH DRY CRI	EEK TO MOUTH AT BIG BLACK RIVER					

		BIG BLACK RIVER					
WATERSHED NAME AS	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
HAMER BAYOU 10	9312	109312	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT BIG BLACI	K RIVER					
LAKE LORMAN 10	6912	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR MADISON NEAR SPIL	LWAY						
LIMEKILN CREEK 10	6911	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	OUTH AT BOGUE CH	ITTO CREEK					
MIDDLE BYWY CREEK 10	0911	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO TH	IE MOUTH AT BIG B	YWY DITCH					
SAND CREEK 10	1112	101112	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT CALABREI	LA CREEK					
SCOOBACHITA CREEK 10	2712	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	OUTH AT ZILPHA CF	EEK					
STRAIGHT FENCE CREEK 10	7011	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	OUTH AT BOGUE CH	ITTO CREEK					

		BIG BLACK RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
TACKETTS CREEK	103711	N/A	Aquatic Life	Support	11/16/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO) MOUTH AT BIG BLAC	K RIVER					
ZILPHA CREEK	102711	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE TO	MOUTH AT BIG BLAC	K RIVER					

		COASTAL STREAMS					
WATERSHED NAME A	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
BAY ST LOUIS BEACH 25	50111	N/A	Primary Cont	act (Recr)	10/28/15	Attaining	2
LOCATION: FROM WASHINGTON STRE	ET TO THE CULVERT	JUST NORTH OF RAMANEDA STREET					
BAYOU LA TERRE 20	04111	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE OF UN WITH	NNAMED TRIB TO MV	VS 2040 BOUNDARY AT CONFLUENCE					
BAYOU LA TERRE 20	04112	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO C	ONFLUENCE WITH U	NNAMED TRIB					
BILOXI EAST BEACH 25	50318	N/A	Primary Cont	act (Recr)	10/28/15	Attaining	2
LOCATION: FROM DUKATE STREET TO) LEE STREET						
BILOXI PORTER AVENUE BEACH 25	50317	N/A	Primary Cont	act (Recr)	10/28/15	Attaining	2
LOCATION: FROM ST PETER STREET TO	O ST FRANCIS STREE	т					
BILOXI RIVER 20	01311	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: FROM MWS 2009 BOUNDAR	RY TO MWS BOUNDA	RY 2020					
BILOXI WEST CENTRAL BEACH 25	50314	N/A	Primary Cont	act (Recr)	10/28/15	Attaining	2
LOCATION: FROM TRAVIA TO I'BERVII	LLE DRIVE						

		COASTAL STREAMS					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Г ДАТЕ	ASSESSMENT STATUS	CATEGORY
BUCCANEER STATE PARK BEACH	250113	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: 100 YARDS EAST TO 10	00 YARDS WEST OF SAM	IPLE LOCATION					
CATAHOULA CREEK	203311	203311	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH .	IOURDAN RIVER					
COURTHOUSE ROAD BEACH	250315	250315	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM VA MAIN ENTRA	NCE TO COURTHOUSE	ROAD					
CRANE CREEK	205211	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT WOLF RIV	/ER					
DEAD TIGER CREEK	203711	203711	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: NEAR KILN FROM HEAD	DWATERS TO CONFLUE	ENCE WITH CATAHOULA CREEK					
EDGEWATER BEACH	250316	250316	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM DEBUYS ROAD T	O EDGEWATER DRIVE						
FLAT BRANCH	200914	200914	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT SAUCIER	CREEK					

		COASTAL STREAMS					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
FRONT BEACH	202613	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM YACHT CLUB TO	JACKSON STREET						
GULFPORT CENTRAL BEACH	250312	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM ALFONSO DRIVE	TO VA MAIN ENTRANO	CE					
GULFPORT EAST BEACH	250313	250313	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM LAUREL DRIVE T	O ANNISTON AVENUE						
GULFPORT HARBOR BEACH	250311	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM 15TH STREET TO	THORNTON AVENUE						
GULFPORT WEST BEACH	250212	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM MARIE AVENUE	TO CAMP AVENUE						
JOURDAN RIVER	203911	N/A	Aquatic Life	Support	11/30/15	Attaining	2
LOCATION: FROM CONFLUENCE WI	TH BACON BAYOU TO	MWS 2042 BOUNDARY	Primary Con	tact (Recr)	10/21/15	Not Attaining, Tmdl Compl	eted 4A
LAKESHORE BEACH	250114	N/A	Primary Con	tact (Recr)	11/03/15	Attaining	2
LOCATION: NEAR LAKESHORE DRIV FROM THE SILVER SLIP		TERS EITHER SIDE OF SAMPLE LOCATION SET AVENUE					

		COASTAL STREAMS					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	Г ДАТЕ	ASSESSMENT STATUS	CATEGORY
LONG BEACH	250213	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM OAK GARDENS	TO GIRARD						
MILL CREEK	204011	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT ROTTEN I	BAYOU					
MILL CREEK	203611	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT CATAHO	ULA CREEK					
OLD FORT BAYOU	202511	N/A	Primary Con	tact (Recr)	11/03/15	Attaining	2
LOCATION: FROM BAYOU TALLA	FO THE 2024 WATERSHE	ED BOUNDARY AT WASHINGTON ST BRIDGE					
PALMER CREEK	200915	200915	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	'O MOUTH AT BILOXI R	IVER					
PASCAGOULA BEACH EAST	250512	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM WESTWOOD STR	REET TO GRAND OAKS						
PASCAGOULA BEACH WEST	250511	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM OLIVER STREET	TO WESTWOOD						

		COASTAL STREAMS					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
PASS CHRISTIAN CENTRAL	250215	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM HENDERSON AVE	NUE TO HIERN AVENU	ΙE					
PASS CHRISTIAN EAST BEACH	250211	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM EPSY AVENUE TO	HAYDEN STREET						
PASS CHRISTIAN WEST BEACH	250214	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM FORT HENRY AVE	NUE TO ELLIOT STRE	ET					
SHEARWATER BEACH	202612	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM WEEKS BAYOU TO) HALSTEAD ROAD						
ST ANDREWS BEACH	250412	N/A	Primary Con	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM BULKHEAD AT W	EST END OF S BELLE F	ONTAINE DR TO 5000 E BELLE FONTAINE					
TCHOUTACABOUFFA RIVER	201511	MS117M1	Primary Con	tact (Recr)	10/27/15	Not Attaining, Tmdl Comp	leted 4A
LOCATION: FROM CONFLUENCE WIT	TH RAMSEY CREEK TO	CONFLUENCE WITH TUXACHANIE CREEK					
TIGER CREEK	200912	200912	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO	MOUTH AT BILOXI RI	VER					

	COASTAL STR	EAMS				
WATERSHED NAME ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSME	NT DATE	ASSESSMENT STATUS	CATEGORY
TURKEY CREEK 202211	202211	Aquatic Life	Support	02/21/12	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH CANAL NUMBER 2	TO HWY 49 BRIDGE	Primary Cont	tact (Recr)	10/27/15	Not Attaining, Tmdl Comp	leted 4A
TURKEY CREEK 202214	N/A	Primary Cont	tact (Recr)	10/27/15	Not Attaining, Tmdl Comp	leted 4A
LOCATION: FROM HWY 49 TO MOUTH AT BERNARD BAY	ÐU					
TUXACHANIE CREEK 201911	N/A	Aquatic Life		12/01/15	Attaining	2
LOCATION: FROM MWS BOUNDARY TO 2018 TO MOUTH A	T TCHOUTACABOUFFA RIVER	Primary Cont	tact (Recr)	10/27/15	Not Attaining, Tmdl Comp	eted 4A
UNNAMED TRIBUTARY TO BAYOU 204013 LASALLE	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH AT BAYOU I	ASALLE					
UNNAMED TRIBUTARY TO ROTTEN 204012 BAYOU	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH AT ROTTEN	BAYOU					
WAVELAND BEACH 250112	N/A	Primary Cont	tact (Recr)	10/28/15	Attaining	2
LOCATION: FROM OAK STREET TO FARVE STREET						
WEST CREEK 201012	200912	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH MCHENRY BRANC	H TO MOUTH AT SAUCIER CREEK					

		COASTAL STREAMS					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
WOLF CREEK	205312	205312	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO	O MOUTH AT WOLF RIV	/ER					
WOLF RIVER	205315	N/A	Aquatic Life	Support	02/17/12	Attaining	2
LOCATION: FROM CONFLUENCE W	ITH CANE CREEK TO H	WY 53 BRIDGE	Primary Cont	act (Recr)	10/27/15	Not Attaining, Tmdl Comple	ted 4A
WOLF RIVER	205414	MS111M1	Primary Cont	act (Recr)	11/05/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: FROM MWS 2053 BOUND	DARY TO BELLS FERRY	' ROAD					

		NORTH INDEPENDENT STR	REAMS				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
BEARMAN CREEK	302412	N/A	Aquatic Life	e Support	11/16/15	Not Attaining	5
LOCATION: FROM THE HEADWATE	RS TO N35°						
BRIDGE CREEK	301912	N/A	Aquatic Life	e Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	O HATCHIE RIVER						
BRIDGE CREEK	301011	MS203BE	Aquatic Life		11/16/15	Not Attaining, Tmdl Complet	
LOCATION: AT CORINTH FROM HEA	ADWATERS TO CONFLU	JENCE WITH TUSCUMBIA RIVER CANAL	Secondary C	Contact	12/02/09	Not Attaining, Tmdl Complet	ted 4A
BYNUM CREEK	300413	N/A	Aquatic Life	e Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT HINKLE C	REEK					
EASTES CREEK	301112	N/A	Aquatic Life	e Support	11/16/15	Not Attaining	5
LOCATION: FROM THE CONFLUENC RIVER CANAL	CE WITH UNDERWOOD	CREEK TO THE MOUTH AT TUSCUMBIA					
ELAM CREEK	301012	N/A	Aquatic Life	e Support	11/16/15	Not Attaining, Tmdl Complet	ted 4A
LOCATION: FROM HEADWATERS T	O MOUTH AT BRIDGE C	REEK					
FOURTH CREEK	301913	N/A	Aquatic Life	e Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT HATCHIE	RIVER					

		NORTH INDEPENDENT STR	REAMS				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
GRAYS CREEK	303511	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	O TN STATE LINE						
HATCHIE RIVER	302411	N/A	Aquatic Life	Support	11/30/15	Not Attaining, Tmdl Complet	ted 4A
LOCATION: FROM THE MWS 3019 B	OUNDARY TO THE MS/	TN STATE LINE					
HINKLE CREEK	300412	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT TUSCUM	BIA RIVER CANAL					
HORN LAKE CREEK	304311	N/A	Aquatic Life	Support	11/30/15	Not Attaining, Tmdl Complet	ted 4A
LOCATION: FROM HEADWATERS T	O MS/TN STATE LINE						
OWL CREEK	301412	301412	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT LITTLE H	ATCHIE RIVER					
PORTERS CREEK	302811	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	O TN STATE LINE						
ROBINSON BOTTOM	303211	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: ROBERSON CREEK FRO	OM HEADWATERS TO M	IOUTH AT WOLF RIVER					

		NORTH INDEPENDENT STR	EAMS				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
TAREBREECHES CREEK	301212	301212	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO	MOUTH AT TUSCUME	BIA RIVER CANAL					
TURKEY CREEK	302112	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO	MOUTH AT MUDDY C	CREEK					
TUSCUMBIA RIVER CANAL	301211	N/A	Aquatic Life	Support	12/01/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: FROM CONFLUENCE WIT	H EASTES CREEK TO	CONFLUENCE WITH TAREBREECHES					
WEST PRONG MUDDY CREEK	302011	302011	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO	MOUTH AT MUDDY C	REEK					

		PASCAGOULA RIVER					
WATERSHED NAME AS	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
ANDERSON BRANCH 40	01711	401711	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT OKAHATT.	A CREEK					
BEAVER CREEK 42	1212	421212	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT HICKORY	CREEK					
BEAVER LAKE 41	8913	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR PURVIS							
BEAVERDAM CREEK 41	9511		Aquatic Life		02/21/12	Attaining	2
LOCATION: FROM CONFLUENCE OF BO	WENS BAY AT 4194		Primary Cont	tact (Recr)	10/20/15	Attaining	2
BIG CREEK 41	9012	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	OUTH AT BLACK CR	EEK					
BIG CREEK 40	9911	N/A	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM MWS 4098 BOUNDAR	RY TO MOUTH AT LE	AF RIVER					
BIG CREEK 40	6711	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM CONFLUENCE WITH	LITTLE CREEK MOU	TH AT CHICKASAWHAY RIVER					

		PASCAGOULA RIVE	R				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
BIG CREEK	406911	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM CONFLUENCE O	F HELL HOLE CREEK TO) CONFLUENCE WITH MASON CREEK					
BIG CREEK	417211	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MWS 4173 BOUNDAR	Y					
BLACK CREEK	418711	N/A	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Comp	leted 4A
LOCATION: FROM MWS 4186 BOUN	IDARY TO CONFLUENC	E AT LITTLE BLACK CREEK					
BLACK CREEK	421511	421511	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Comp	leted 4A
LOCATION: FROM MWS BOUNDAR	Y 4211 TO MWS BOUND	ARY 4216					
BLACK CREEK	419611	N/A	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Compl	leted 4A
LOCATION: FROM CONFLUENCE W	/ITH MACKLIN CREEK 1	O CONFLUENCE WITH CYPRESS CREEK					
BLACK CREEK	421111	421111	Aquatic Life		01/23/14	Attaining	2
LOCATION: FROM CONFLUENCE W	/ITH CYPRESS CREEK T	O MWS 4215 BOUNDARY	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Comp	leted 4A
BLUFF CREEK	417811	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM MWS 4177 BOUN	IDARY TO CONFLUENC	E WITH MOUNGERS CREEK					

		PASCAGOULA RIVER					
WATERSHED NAME A	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
BLUFF CREEK 42	20611	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS TO CO	ONFLUENCE WITH R	ED CREEK					
BOWIE RIVER 42	25012	N/A	Primary Cont	tact (Recr)	10/20/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUENCE WITH	DRY CREEK TO MW	S 4118 BOUNDARY AT 159					
BOWIE RIVER 41	11611	MS084M	Primary Cont	tact (Recr)	10/20/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUENCE WITH	HAYDEN CREEK TO	MWS 4250					
CEDAR CREEK 40	08611	N/A	Aquatic Life	Support	11/13/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	IOUTH AT QUARTERI	JAH CREEK					
CHICKASAWHAY RIVER 40)5911	N/A	Primary Cont	tact (Recr)	10/21/15	Attaining	2
LOCATION: FROM MWS BOUNDARY 40	53 TO CONFLUENCE	WITH EUCUTTA CREEK					
CHICKASAWHAY RIVER 40	06212	N/A	Primary Cont	tact (Recr)	10/21/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUENCE WITH	YELLOW CREEK TO	COUNTY ROAD BRIDGE					
CHICKASAWHAY RIVER 40	04412	N/A	Aquatic Life	Support	12/01/15	Attaining	2
LOCATION: FROM CONFLUENCE WITH STONEWALL	OKATIBBEE CREEK	TO RIVER ROAD BRIDGE CROSSING AT					

		PASCAGOULA RIVE	Ł				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Γ DATE	ASSESSMENT STATUS CATE	GORY
CHICKASAWHAY RIVER	424011	N/A	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM MWS 4045 TO CO	ONFLUENCE WITH FALL	EN CREEK					
CHICKASWAY RIVER	407711	N/A	Aquatic Life	Support	11/30/15	Attaining	2
LOCATION: FROM BOUNDARY WI	TH MWS 4075 TO MWS B	OUNDARY 4078					
CHUNKY CREEK	401811	401811	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM CONFLUENCE W	VITH SMITH BRANCH TO) MOUTH AT OKAHATTA CREEK					
CHUNKY RIVER	402312	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM CONFLUENCE W BOUNDARY	VITH CHUNKY CREEK A	ND POTTERCHITTO CREEK TO THE MWS4026					
CHUNKY RIVER	402611	N/A	Aquatic Life	Support	11/30/09	Not Attaining	5
LOCATION: FROM CONFLUENCE W	VITH POSSUM CREEK TO) MOUTH AT CHICKASAWHAY RIVER	Primary Con	tact (Recr)	10/21/15	Attaining	2
CLEAR CREEK	409212	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT OAKOHA	Y CREEK					
COLDWATER CREEK	404011	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT BUCKATI	UNNA CREEK					

		PASCAGOULA RIVE	R				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS C	ATEGORY
CYPRESS CREEK	420512	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	RED CREEK					
CYPRESS CREEK	421011	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	'O MWS 4211 BOUNDAR	Y					
DRY CREEK	403811	403811	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT BUCKATI	UNNA CREEK					
DRY CREEK	411111	N/A	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: NEAR TERRELL FROM	HEADWATERS TO MOU	TH AT BOWIE CREEK					
ESCATAWPA RIVER	422911	MS107M1	Aquatic Life	Support	12/03/15	Not Attaining, Tmdl Complete	d 4A
LOCATION: NEAR AGRICOLA FROM	M MS/AL STATE LINE TO	O CONFLUENCE WITH RED CREEK	Fish Consum	nption	01/20/10	Not Attaining, Tmdl Complete	d 4A
ESCATAWPA RIVER	423011	MS107M1	Aquatic Life	Support	12/01/15	Not Attaining, Tmdl Complete	d 4A
LOCATION: FROM CONFLUENCE W	TTH RED CREEK TO MW	VS 4231 BOUNDARY	Fish Consum	nption	01/20/10	Not Attaining, Tmdl Complete	d 4A
EUCUTTA CREEK	405811	405811	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM OUTFALL OF SM RIVER	ALL UNNAMED POND	FO CONFLUENCE WITH CHICKASAWHAY					

		PASCAGOULA RIVER	Ł				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
FALLEN CREEK	424012	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT CHICKAS	AWHAY RIVER					
FLINT CREEK	420211	420211	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM OUTFALL OF FLI	NT CREEK RESERVOIR	TO MOUTH AT RED CREEK					
GAINES CREEK	415911	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM THE CONFLUENC MWS4160 BOUNDARY	CE OF SAND HILL CREE	K AND PINEY WOODS CREEK TO THE					
GORDON CREEK	405011	405011	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT SOUENLO	DVIE CREEK					
HORTONS MILL CREEK	406111	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	CHICKASAWHAY RIVER					
HOUSTON CREEK	400312	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT OKATIBB	EE CREEK					
INDIAN CREEK	417612	417612	Aquatic Life	Support	11/20/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT PASCAGO	DULA RIVER					

	PASCAG	OULA RIVER
WATERSHED NAME ASSESSMEN	T UNIT § 303(d) ID	USE ASSESSMENT DATE ASSESSMENT STATUS CATEGORY
KIRBY CREEK 425811	N/A	Aquatic Life Support 11/20/15 Attaining 2
LOCATION: FROM LAKE TOC-A-LEEN TO MOUTH	AT RED CREEK	
KITTRELL MILL CREEK 406912	N/A	Aquatic Life Support 11/19/15 Attaining 2 0 0 0 0 0 0
LOCATION: FROM HEADWATERS TO MOUTH AT I	BIG CREEK	Secondary Contact 11/24/09 Attaining 2
LEAF RIVER 416412	N/A	Secondary Contact 10/21/15 Not Attaining, Tmdl Completed 4A
LOCATION: FROM CONFLUENCE WITH MILL CRE	EK TO CONFLUENCE WITH CARTER CF	EEK
LEONARDS MILL CREEK 410312	410312	Aquatic Life Support 11/19/15 Attaining 2
LOCATION: FROM HEADWATERS TO MOUTH AT C	OKATOMA CREEK	
LITTLE BLACK CREEK 418911	N/A	Aquatic Life Support 11/20/15 Attaining 2
LOCATION: FROM 4188 MWS BOUNDARY TO CON	FLUENCE WITH BLACK CREEK	
LITTLE CEDAR CREEK 417411	417411	Aquatic Life Support 11/19/15 Not Attaining 5
LOCATION: FROM HEADWATERS TO MOUTH AT I	BIG CEDAR CREEK	
LITTLE CREEK 406712	N/A	Aquatic Life Support 11/20/15 Attaining 2
LOCATION: FROM HEADWATERS TO MOUTH AT I	BIG CREEK	

	PASCA	GOULA RIVER			
WATERSHED NAME ASSESSM	IENT UNIT § 303(d) ID	USE	ASSESSMENT DATE	ASSESSMENT STATUS	CATEGORY
MARTIN CREEK 407813	N/A	Aquatic Life	Support 11/20/	5 Attaining	2
LOCATION: FROM HEADWATERS TO LEAKSVI	LLE POTW OUTFALL				
MARTIN CREEK 407812	N/A	Aquatic Life	Support 11/20/	5 Not Attaining	5
LOCATION: FROM LEAKSVILLE POTW OUTFAI RIVER	LL DOWNSTREAM TO MOUTH AT CHICK	ASAWHAY			
MAYNOR CREEK 406411	N/A	Aquatic Life	Support 11/19/	5 Attaining	2
LOCATION: FROM MAYNOR CREEK WATER PA	ARK TO MOUTH AT BIG CREEK				
MILL CREEK 404211	N/A	Aquatic Life	Support 11/20/	5 Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH A	AT BUCKATUNNA CREEK				
MONROE CREEK 418411	N/A	Aquatic Life	Support 11/20/	5 Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH A	AT BLACK CREEK				
MOUNGERS CREEK 417911	N/A	Aquatic Life	Support 11/20/	5 Attaining	2
LOCATION: FROM HEADWATERS TO CONFLUE	ENCE WITH BLUFF CREEK				
OAKEY WOODS CREEK 425111	N/A	Aquatic Life	Support 11/20/	5 Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH A	AT LEAF RIVER				

		PASCAGOULA RIVER	Ł				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Г ДАТЕ	ASSESSMENT STATUS	CATEGORY
OKATIBBEE CREEK	401011	401011	Aquatic Life	Support	11/30/15	Not Attaining	5
LOCATION: FROM CONFLUENCE O	F SOWASHEE CREEK TO) MWS 4011 BOUNDARY					
OKATOMA CREEK	410811	N/A	Primary Con	tact (Recr)	10/21/15	Attaining	2
LOCATION: FROM MWS 4107 BOUN	NDARY TO CONFLUENC	E WITH BOUIE RIVER					
OKATOMA CREEK	410311	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM CONFLUENCE O	OF MCLAUREN CREEK TO	O CONFLUENCE WITH SHELBY CREEK					
OKATOMA CREEK	410011	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM CONFLUENCE W	VITH DRY CREEK TO MV	VS 4102 BOUNDARY					
OKATOMA CREEK	410511	N/A	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: FROM CONFLUENCE W	VITH ROGERS CREEK TO	OCONFLUENCE WITH BIG SWAMP CREEK					
PASCAGOULA RIVER	418111	MSPASRM1	Fish Consum		01/20/10	Not Attaining, Tmdl Comp	
LOCATION: FROM MWS BOUNDAR	Y 4176 TO MWS BOUND	ARY 4182	Primary Con	tact (Recr)	10/21/15	Not Attaining, Tmdl Comp	leted 4A
PATTON CREEK	406211	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: NEAR WAYNESBORO F	FROM WAYNESBORO LA	AKE TO MOUTH AT CHICKASAWHAY RIVER					

		PASCAGOULA RIVE	R				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS C	ATEGORY
PENANTLY CREEK	404712	404712	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT SOUENLO	DVIE CREEK					
POPLAR CREEK	419212	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	BLACK CREEK					
PRIESTS CREEK	416112	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT LEAF RIV	/ER					
RED CREEK	420911	MS103RM	Aquatic Life	Support	11/30/15	Attaining	2
LOCATION: FROM CONFLUENCE W	/ITH FLURRY MILL PON	D BRANCH TO MOUTH AT BLACK CREEK	Primary Con	tact (Recr)	10/27/15	Not Attaining, Tmdl Completed	d 4A
RED CREEK	419711	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS T	CO MWS 4198 BOUNDAR	Y					
RED CREEK	420511	N/A	Primary Con	tact (Recr)	10/27/15	Not Attaining, Tmdl Complete	d 4A
LOCATION: FROM CONFLUENCE W	/ITH OLD CREEK TO MV	VS 4207 BOUNDARY					
REESE CREEK	416212	N/A	Aquatic Life	Support	11/20/15	Attaining	2
LOCATION: FROM TEMPLE RD TO I	MOUTH AT LEAF RIVER						

	PASCA	GOULA RIVER			
WATERSHED NAME ASSESSN	IENT UNIT § 303(d) ID	USE	ASSESSMENT DATE	ASSESSMENT STATUS	CATEGORY
ROCKY CREEK 426211	N/A	Aquatic Life	Support 11/20/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH A	AT ESCATAWPA RIVER				
SCOTCHENFLIPPER CREEK 404612	N/A	Aquatic Life	Support 11/20/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH A	AT SOUENLOVIE CREEK				
SHELTON CREEK 410812	410812	Aquatic Life	Support 11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH A	AT OKATOMA CREEK				
SHUBUTA CREEK 405511	N/A	Aquatic Life	Support 11/20/15	Attaining	2
LOCATION: FROM CONFLUENCE WITH HOLLIG	CAR CREEK TO CONFLUENCE WITH BOG	UE HOMO			
SOWASHEE CREEK 400911	400911	Aquatic Life	Support 11/19/15	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH UNNAM WITH OKATIBBEE CREEK	MED TRIB AT MWS 4237 BOUNDARY TO C	CONFLUENCE			
STATION CREEK 425112	N/A	Aquatic Life	Support 11/20/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH A	AT OAKEY WOODS CREEK				
TALLABOGUE CREEK 424611	N/A	Aquatic Life	Support 11/20/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH A	AT LEAF RIVER				

	PASCAGOULA RIVER									
USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY						
Aquatic Life	Support	12/01/15	Not Attaining	5						
Aquatic Life	Support	12/02/15	Attaining	2						
Aquatic Life	Support	11/20/15	Attaining	2						
Aquatic Life	Support	11/20/15	Attaining	2						
Aquatic Life	Support	11/20/15	Not Attaining	5						
Aquatic Life	Support	11/20/15	Not Attaining, Tmdl Compl	leted 4A						
Aquatic Life	Support	11/19/15	Not Attaining	5						
-	Aquatic Life Aquatic Life	Aquatic Life Support Aquatic Life Support	Aquatic Life Support 12/01/15 Aquatic Life Support 12/02/15 Aquatic Life Support 11/20/15 Aquatic Life Support 11/20/15	Aquatic Life Support 12/01/15 Not Attaining Aquatic Life Support 12/02/15 Attaining Aquatic Life Support 11/20/15 Not Attaining						

PASCAGOULA RIVER									
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT D	ATE	ASSESSMENT STATUS	CATEGORY		
WEST LITTLE THOMPSON CREEK	415112 O MOUTH AT THOMPSO		Aquatic Life	Support 1	1/19/15	Attaining	2		

		PEARL RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
ANCHOR LAKE	520013	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR CARRIER SPILLY	VAY						
BAHALA CREEK	514111	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM CONFLUENCE W	/ITH LITTLE BAHALA CI	REEK TO MOUTH AT PEARL RIVER					
BAHALA CREEK	513811	N/A	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS T	TO CONFLUENCE WITH	RUSSELL CREEK					
BEAR CREEK	514611	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT FAIR RIV	ER					
BIG BRANCH	519213	N/A	Aquatic Life	Support	11/23/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT LITTLE H	ELL CREEK					
BIG CREEK	513211	N/A	Aquatic Life	Support	11/18/15	Not Attaining	5
LOCATION: FROM MWS 5131 BOUN	IDARY TO MOUTH AT S	IRONG RIVER					
BOGUE CHITTO	521711	MSBGCHTRM4	Fish Consum		01/25/10	Not Attaining, Tmdl Comple	
LOCATION: FROM PIKE/WALTHAL	L COUNTY LINE TO MW	/S BOUNDARY 5218	Primary Cont	tact (Recr)	10/20/15	Not Attaining, Tmdl Comple	eted 4A

		PEARL RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
BOGUE CHITTO 5	522811	MSBGCHT	Aquatic Life S	Support	12/01/15	Attaining	2
			Fish Consum	otion	01/25/10	Not Attaining, Tmdl Comple	ted 4A
LOCATION: FROM MAGEES CREEK TO	J LA STATE LINE		Primary Cont	act (Recr)	10/20/15	Not Attaining, Tmdl Comple	ted 4A
BOONE CREEK 5	521113	N/A	Aquatic Life S	Support	11/18/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO P	MOUTH AT BOGUE CH	ПТТО					
BRUSHY CREEK	510911	N/A	Aquatic Life S	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO P	MOUTH AT PEARL RIV	/ER					
CANE CREEK 5	507411	N/A	Aquatic Life S	Support	11/20/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: NEAR GOSHEN SPRINGS F TO ROSS BARNETT RESER		AT RAILROAD TRACKS SOUTH OF HWY 43					
CANEY CREEK 5	511411	N/A	Aquatic Life S	Support	11/18/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO P	MOUTH AT STRONG R	IVER					
CLABBER CREEK 5	521412	N/A	Aquatic Life S	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO P	MOUTH AT BOGUE CH	IITTO RIVER					
CLEAR CREEK 5	521512	N/A	Aquatic Life S	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO 1	MOUTH AT BOGUE CH	IITTO (521511)					
LOCATION: FROM HEADWATERS TO P	MOUTH AT BOGUE CH						

		PEARL R	IVER				
WATERSHED NAME ASSES	SSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Г ДАТЕ	ASSESSMENT STATUS	CATEGORY
CLEAR CREEK 51761	1	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: NEAR SANDY HOOK FROM HEA	ADWATERS TO N	IOUTH AT PEARL RIVER					
CLEAR CREEK 50861	1	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUT	TH AT PELAHATO	CHIE CREEK					
COFFEE BOGUE 50781	1	N/A	Aquatic Life	Support	11/18/15	Not Attaining, Tmdl Compl	leted 4A
LOCATION: FROM 5077 MWS BOUNDARY T	O MOUTH AT PE	ARL RIVER					
COLE CREEK 50611	1	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MWS	5059 BOUNDARY						
COON CREEK 503713	3	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUT	TH AT LOBUTCH	A CREEK					
DABBS CREEK 51261	1	MS167DE	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Compl	leted 4A
LOCATION: FROM MWS 5125 BOUNDARY T	FO MOUTH AT ST	RONG RIVER					
EAST FORK GREENS CREEK 515412	2	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO CONF	LUENCE WITH W	ÆST FORK GREENS CREEK					

		PEARL RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Г ДАТЕ	ASSESSMENT STATUS	CATEGORY
FAIR RIVER	514511	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM CONFLUENCE	WITH BEAR CREEK TO C	ONFLUENCE WITH PEARL RIVER					
FANNEGUSHA CREEK	508111	MS151FE	Aquatic Life	Support	11/18/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: FROM CONFLUENCE	WITH ROLLISON CREEK	TO MOUTH AT ROSS BARNETT RESERVOIR					
HALBERT BRANCH	521012	MS187HE	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: AT BROOKHAVEN FI CREEK	ROM HEADWATERS TO CO	DNFLUENCE WITH EAST BOGUE CHITTO					
HALLS CREEK	515011	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: NEAR MONTICELLO	FROM HEADWATERS TO	MOUTH AT THE PEARL RIVER					
HARPER CREEK	516512	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	S TO MOUTH AT PEARL RI	VER					
HOLIDAY CREEK	516211	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	S TO CONFLUENCE WITH	UNNAMED TRIB AT MWS 5163 BOUNDARY					
HONTOKALO CREEK	504711	N/A	Aquatic Life	Support	11/18/15	Not Attaining	5
LOCATION: NEAR STEEL FROM H	HEADWATERS TO MOUTH	AT LITTLE (SOUTH) CANAL					

		PEARL RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	T DATE	ASSESSMENT STATUS	CATEGORY
JAYBIRD CREEK	516011	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT WHITE SA	AND CREEK					
JOFUSKA CREEK	501911	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS 5027	TO WETLAND ADJACEN	T TO THE PEARL RIVER AT MWS BOUNDARY					
LAND CREEK	500911	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS	TO MOUTH AT BOGUE C	HITTO RIVER					
LITTLE COPIAH CREEK	513312	513312	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS	ТО МОИТН АТ СОРІАН С	CREEK					
LOVE CREEK	521713	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT BOGUE C	нпто					
LOWER LITTLE CREEK	517911	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM CONFLUENCE	WITH HURRICANE CREE	K TO MOUTH AT PEARL RIVER					
LOWER LITTLE CREEK	517711	N/A	Aquatic Life	Support	11/23/15	Attaining	2
LOCATION: FROM HEADWATERS	TO CONFLUENCE WITH	GULLY CREEK					

PEARL RIVER									
WATERSHED NAME ASS	SESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY		
LUKFAPA CREEK 502	111	N/A	Aquatic Life	Support	11/20/15	Attaining	2		
LOCATION: FROM HEADWATERS TO MO	OUTH AT PEARL RIV	/ER							
MAGEES CREEK 522	611	N/A	Aquatic Life	Support	11/18/15	Attaining	2		
LOCATION: FROM CONFLUENCE OF DRY	CREEK IN TYLER	FOWN TO MOUTH AT BOGUE CHITTO	Primary Cont	tact (Recr)	10/21/15	Not Attaining, Tmdl Compl	eted 4A		
PEARL RIVER 509	111	N/A	Aquatic Life		12/11/15	Not Attaining, Tmdl Compl			
LOCATION: FROM CONFLUENCE WITH H	IANGING MOSS CR	EEK TO MWS 5092 BOUNDARY	Secondary Co	ontact	12/19/13	Not Attaining, Tmdl Compl	eted 4A		
PEARL RIVER 510	711	510711	Aquatic Life	Support	12/11/15	Not Attaining, Tmdl Compl	eted 4A		
LOCATION: FROM MWS BOUNDARY 5106	6 TO CONFLUENCE	WITH WEEKS MILL CREEK	Primary Cont	tact (Recr)	10/21/15	Not Attaining, Tmdl Compl	eted 4A		
PEARL RIVER 520	611	N/A	Primary Cont	tact (Recr)	10/21/15	Attaining	2		
LOCATION: FROM MWS 5204 BOUNDARY	Y TO MWS 5207 BOU	JNDARY							
PEARL RIVER 516	511	N/A	Primary Cont	tact (Recr)	10/27/15	Attaining	2		
LOCATION: FROM CONFLUENCE WITH H	IOLIDAY CREEK TO) MWS BOUNDARY 5166							
PEARL RIVER 508	911	N/A	Aquatic Life	Support	12/11/15	Not Attaining, Tmdl Compl	eted 4A		
LOCATION: FROM ROSS BARNETT RESER	RVOIR TO CONFLU	ENCE WITH HANGING MOSS CREEK	Secondary Co	ontact	12/19/13	Not Attaining, Tmdl Compl	eted 4A		

		PEARL RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
PEARL RIVER	510012	N/A	Aquatic Life	Support	12/11/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUE	ENCE OF BIG CREEK TO MWS 5	106 BOUNDARY					
PEARL RIVER	514711	N/A	Primary Con	tact (Recr)	10/21/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUE	ENCE WITH PRETTY BRANCH T	O MWS BOUNDARY 5149					
PEARL RIVER	518211	N/A	Primary Con	tact (Recr)	10/26/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUE	ENCE WITH BIG CREEK TO MW	S BOUNDARY 5184 BELOW HIGHWAY 26					
PEARL RIVER	510011	N/A	Aquatic Life	Support	12/01/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM CONFLUE	ENCE WITH TRAYHON CREEK '	IO CONFLUENCE WITH BIG CREEK	Primary Con	tact (Recr)	12/01/15	Not Attaining, Tmdl Comple	eted 4A
PEARL RIVER	502011	N/A	Aquatic Life	Support	12/01/15	Attaining	2
LOCATION: FROM CONFLUE	ENCE OF KENTAWKA CANAL T	O THE MWS 5028 BOUNDARY					
PELAHATCHIE CREEK EMBAY ROSS BARNETT RESERVOIR	MENT 508812	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: PELAHATCHIE (COUNTY	CREEK EMBAYMENT OF THE R	OSS BARNETT RESERVOIR, RANKIN					
PICKENS CREEK	504112	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWA	TERS TO MOUTH AT COBBS C	REEK					
LOCATION: FROM HEADWA	ATERS TO MOUTH AT COBBS C	NEEN					

	PEARL RIVER										
WATERSHED NAME A	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY				
PRETTY BRANCH 5	514811	N/A	Aquatic Life	Support	11/18/15	Attaining	2				
LOCATION: NEAR FERGUSON FROM H	EADWATERS TO THE	PEARL RIVER									
PURVIS CREEK 5	511711	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5				
LOCATION: FROM HEADWATERS TO N	MOUTH AT STRONG R	IVER									
PUSHEPATAPA CREEK 5	518511	N/A	Aquatic Life !	Support	11/18/15	Attaining	2				
LOCATION: FROM HEADWATERS TO L	LA STATE LINE										
RASPBERRY CREEK 5	511611	N/A	Aquatic Life S	Support	11/19/15	Attaining	2				
LOCATION: FROM HEADWATERS TO N	MOUTH AT STRONG R	IVER									
RAWLS CREEK 5	517311	N/A	Aquatic Life S	Support	11/19/15	Attaining	2				
LOCATION: FROM HEADWATERS TO N	MOUTH AT RAWLS BA	Y IN PEARL RIVER FLOODPLAIN									
ROSS BARNETT RESERVOIR 5	607511	N/A	Aquatic Life !	Support	12/02/15	Attaining	2				
LOCATION: ROSS BARNETT RESERVO	IR AT JACKSON, MS										
RUSSELL CREEK 5	513812	N/A	Aquatic Life	Support	11/19/15	Attaining	2				
LOCATION: FROM HEADWATERS TO N	MOUTH AT BAHALA C	REEK									

		PEARL RIVER					
WATERSHED NAME ASSE	ESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
SILVER CREEK 52181	12	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOU	UTH AT BOGUE CH	ІГТТО					
SIMON CREEK 51371	11	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOU	TH AT IRVING CF	REEK					
STEEL CREEK 51351	11	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOU	TH AT THE PEAR	L RIVER					
STEEN CREEK 51031	11	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM MWS 5102 BOUNDARY	TO MOUTH AT PE	ARL RIVER					
STRONG RIVER 51291	11	N/A	Aquatic Life	Support	12/18/09	Attaining	2
LOCATION: FROM 5124 MWS BOUNDARY	TO MOUTH AT PE		Primary Cont	act (Recr)	10/27/15	Not Attaining, Tmdl Comple	ted 4A
STRONG RIVER 51191	11	N/A	Aquatic Life	Support	11/30/15	Attaining	2
LOCATION: NEAR D'LO FROM MWS 5115 B	OUNDARY TO MY	WS 5124 BOUNDARY					
TENMILE CREEK 51721	11	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOU	TH AT PEARL RIV	/ER					

	PEARL RIV	ER			
WATERSHED NAME ASSESSMENT UNI	Г § 303(d) ID	USE	ASSESSMENT DATE	ASSESSMENT STATUS	CATEGORY
TIBBY CREEK 505811	N/A	Aquatic Life	Support 11/16/15	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH ROBINSON BRAN	ICH TO 5056 MWS BOUNDARY				
TOPISAW CREEK 522211	N/A	Aquatic Life	Support 11/18/15	Not Attaining	5
LOCATION: FROM 5219 MWS BOUNDARY TO CONFLUEN	CE AT BOGUE CHITTO				
TOWN CREEK 503211	N/A	Aquatic Life	Support 11/16/15	Not Attaining	5
LOCATION: AT CARTHAGE FROM HEADWATERS TO THE	E PEARL RIVER				
TURTLE SKIN CREEK 520511	N/A	Aquatic Life	Support 11/19/15	Not Attaining	5
LOCATION: NEAR SANTA ROSA FROM HEADWATERS TO) CONFLUENCE WITH MIKES RIVER				
TUSCOLAMETA CREEK 505111	N/A	Aquatic Life	Support 11/16/15	Not Attaining, Tmdl Compl	eted 4A
LOCATION: FROM HEADWATERS AT MWS 5046 BOUNDA	RY TO MOUTH AT PEARL RIVER				
UNNAMED TRIB TO HOLIDAY CREEK 516212	N/A	Aquatic Life	Support 11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH AT HOLIDA	AY CREEK				
UPPER LOBUTCHA CREEK 503511	N/A	Aquatic Life	Support 12/02/15	Not Attaining, Tmdl Compl	eted 4A
LOCATION: FROM 5034 MWS BOUNDARY TO MWS BOUN	IDARY 5036				

		PEARL RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS CAT	EGORY
UPPER LOBUTCHA CREEK	503411	N/A	Aquatic Life	Support	12/02/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM HEADWATERS T	O MWS BOUNDARY 503	35					
WEST FORK GREENS CREEK	515413	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	EAST FORK GREENS CREEK					
WEST FORK PUSHEPATAPA CREEK	522711	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O LA STATE LINE						
WHITE SAND CREEK	516111	516111	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM CONFLUENCE W PEARL RIVER	TTH LITTLE WHITE SAN	D CREEK (JAYBIRD CREEK) TO MOUTH AT					
YOCKANOOKANY RIVER	505911	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE OF	F UNNAMED TRIB AT M	ICCOOL TO MWS BOUNDARY 5062					
YOCKANOOKANY RIVER	506811	MS147E	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: NEAR THOMASTOWN F	FROM MWS BOUNDARY	5067 TO MWS BOUNDARY 5069	Fish Consum	nption	01/21/10	Not Attaining, Tmdl Completed	4A

		SOUTH INDEPENDENT STR	REAMS				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS CAT	FEGORY
BATES CREEK	608712	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT SANDY C	REEK					
BAYOU PIERRE	603311	MS450E	Aquatic Life	Support	11/16/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM BARLAND CRE	EK TO MOUTH AT BAYO	U PIERRE NEAR PORT GIBSON					
BAYOU PIERRE	601611	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE	WITH TURKEY CREEK TO	O CONFLUENCE WITH WHITE OAK CREEK					
BAYOU PIERRE	602711	602711	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM CONFLUENCE	WITH WHITE OAK CREEF	K TO CONFLUENCE WITH STORM CREEK					
BAYOU PIERRE	604111	604111	Primary Con	tact (Recr)	10/20/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM CONFLUENCE	WITH LITTLE BAYOU PIE	ERRE TO CONFLUENCE WITH WIDOWS					
BAYOU PIERRE	602812	N/A	Aquatic Life		11/30/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM CONFLUENCE TO BAYOU PIERRE AT		CONFLUENCE WITH UNNAMED TRIBUTARY	Secondary C	ontact	12/03/09	Attaining	2
BROWNS CREEK	609612	N/A	Aquatic Life	Support	11/18/15	Not Attaining	5
LOCATION: FROM HEADWATERS	TO MOUTH AT BUFFALC) RIVER					

		SOUTH INDEPENDENT ST	REAMS				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSM	IENT DATE	ASSESSMENT STATUS	CATEGORY
BRUSHY CREEK	607711	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEAD	DWATERS TO MOUTH AT HOMOCH	IITTO RIVER					
BRUSHY CREEK	601011	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEAD PIERRE	OWATERS AT CONFLUENCE WITH	THOMPSON CREEK TO MOUTH AT BAYOU					
BRUSHY CREEK	607012	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEAD	DWATERS TO MOUTH AT MIDDLE I	FORK HOMOCHITTO RIVER					
BUFFALO RIVER	610111	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM MWS	BOUNDARY 6098 TO MWS BOUND	DARY 6104					
CARS CREEK	612112	N/A	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: NEAR LIBER	RTY FROM HEADWATERS TO MOU	TH AT EAST FORK AMITE RIVER					
CASTON CREEK	607611	N/A	Aquatic Life		11/16/15	Attaining	2
LOCATION: FROM HEAD	DWATERS TO MOUTH AT HOMOCH	IITTO RIVER	Secondary C	ontact	11/30/09	Attaining	2
COMITE CREEK	613211	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: NEAR CENT	REVILLE FROM HEADWATERS TO	MOUTH AT LOUISIANA STATE LINE					

	SOUTH INDEPEND	ENT STREAMS			
WATERSHED NAME ASSESSMENT UNIT	§ 303(d) ID	USE ASSESSME	ENT DATE	ASSESSMENT STATUS	CATEGORY
CROOKED CREEK 609011	N/A	Aquatic Life Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH AT HOMOCH	HITTO RIVER				
DAYS CREEK 612312	N/A	Aquatic Life Support	11/18/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH AT WEST FO	RK AMITE RIVER				
DOWD CREEK 600211	MS452E	Aquatic Life Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH AT RODNEY	LAKE	Secondary Contact	11/24/09	Not Attaining, Tmdl Complet	ted 4A
DRY BAYOU 608611	N/A	Aquatic Life Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH AT CANEY F	BRANCH				
DRY CREEK 608211	608211	Aquatic Life Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOUTH AT HOMOCH	HITTO RIVER				
EAST FORK AMITE RIVER 612111	N/A	Aquatic Life Support	02/15/12	Attaining	2
LOCATION: FROM MWS BOUNDARY 6120 TO LOUISIANA	STATE LINE	Primary Contact (Recr)	11/10/15	Not Attaining, Tmdl Complet	ted 4A
FORDS CREEK 610011	N/A	Aquatic Life Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH AT BUFFALO	O RIVER				

USE ASSESSMENT DATE ASSESSMENT STATUS CATEGORY
Aquatic Life Support 11/16/15 Attaining 2
Aquatic Life Support 11/16/15 Attaining 2
N CREEK
Aquatic Life Support 11/30/15 Not Attaining 5
REEK
Primary Contact (Recr) 10/21/15 Not Attaining, Tmdl Completed 4A
Aquatic Life Support 01/09/14 Attaining 2
EK AT MWS 6033
Aquatic Life Support 11/18/15 Attaining 2
Aquatic Life Support 11/16/15 Attaining 2

		SOUTH INDEPENDENT STRI	EAMS				
WATERSHED NAME ASS	SESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
MCCALL CREEK 606	5411	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: FROM CONFLUENCE OF BLU	JE CREEK TO CONFI	JUENCE OF HURRICANE CREEK					
MCCALL CREEK 606	5611	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE OF HUR	RRICANE CREEK TO	MOUTH AT HOMOCHITTO RIVER					
MIDDLE FORK HOMOCHITTO RIVER 607	7011	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO CO	NFLUENCE OF CAM	ERON CREEK AT MWS 6072 BOUNDARY					
MIDDLE FORK HOMOCHITTO RIVER 607	7211	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM CONFLUENCE OF CAN	MERON CREEK TO M	IOUTH AT HOMOCHITTO RIVER					
MIDDLE FORK THOMPSON CREEK 611	1511	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO LA	STATE LINE						
MILLBROOK CREEK 610	0512	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO MO	OUTH AT BUFFALO F	RIVER					
NORTH DRY CREEK 606	5112	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MO	DUTH AT HOMOCHII	TO RIVER					

SOUTH INDEPENDENT STREAMS										
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSM	ENT DATE	ASSESSMENT STATUS	CATEGORY			
PERCY CREEK	610611	N/A	Aquatic Life	Support	11/18/15	Attaining	2			
LOCATION: FROM HEAD	VATERS TO MOUTH AT BUFFALC	RIVER								
PICKNEYVILLE CREEK	611211	N/A	Aquatic Life	Support	11/18/15	Not Attaining	5			
LOCATION: FROM HEADV	VATERS TO MOUTH AT LITTLE B	AYOU SARA								
PRETTY CREEK	608311	608311	Aquatic Life	Support	11/16/15	Attaining	2			
LOCATION: FROM HEADV	WATERS TO MOUTH AT HOMOCH	ITTO RIVER								
REDDING CREEK	608012	N/A	Aquatic Life	Support	11/16/15	Attaining	2			
LOCATION: FROM HEAD	WATERS TO MOUTH AT FOSTER (REEK								
RICHARDSON CREEK	607911	N/A	Aquatic Life	Support	11/16/15	Attaining	2			
LOCATION: FROM HEAD	VATERS TO MOUTH AT HOMOCH	ITTO RIVER								
SANDY CREEK	608811	N/A	Aquatic Life	Support	11/16/15	Not Attaining	5			
LOCATION: FROM CONFL	UENCE OF SWAFFORD CREEK TO) MOUTH AT HOMOCHITTO CREEK								
TALLAHALLA CREEK	602611	MS448E	Aquatic Life	Support	11/16/15	Not Attaining, Tmdl Comp	leted 4A			
LOCATION: FROM CONFL	UENCE WITH LITTLE TALLAHAL	LA CREEK TO MOUTH AT WHITE OAK								

	SOUTH INDEPENDENT	STREAMS				
WATERSHED NAME ASSESSMENT UNIT	Γ § 303(d) ID	USE	ASSESSMEN	T DATE	ASSESSMENT STATUS	CATEGORY
TANGIPAHOA RIVER613811	N/A	Aquatic Life	Support	12/01/15	Attaining	2
LOCATION: FROM CONFLUENCE WITH LITTLE TANGIPA	HOA RIVER TO THE MS/LA STATE LINE					
TAR CREEK 608011	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO MOUTH AT FOSTER	S CREEK					
TERRYS CREEK 614211	614211	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO MS/LA STATE BOU	NDARY					
THOMPSON CREEK 611311	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS NEAR CENTERVILLE T	O LA STATE LINE					
TICKFAW RIVER 613311	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: FROM HEADWATERS NEAR MIXON TO MWS	BOUNDARY 6134					
WEST FORK AMITE RIVER 612511	N/A	Primary Con	ntact (Recr)	10/21/15	Not Attaining, Tmdl Comp	leted 4A
LOCATION: FROM MWS BOUNDARY 6124 TO LA STATE I	INE					
WEST FORK THOMPSON CREEK 611411	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO LA STATE LINE						

		SOUTH INDEPENDENT STR	EAMS				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
WHITE CREEK	610612	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO	O MOUTH AT PERCY CI	REEK					
WHITES CREEK	609311	MS469WE	Aquatic Life	Support	11/18/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO	O MOUTH AT SECOND	CREEK					
ZEIGLER CREEK	607811	N/A	Aquatic Life	Support	11/16/15	Attaining	2
LOCATION: FROM HEADWATERS TO	O MOUTH AT HOMOCH	ITTO RIVER					

		TENNESSEE RIVE	R				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
BEAR CREEK	701111	N/A	Aquatic Life	Support	12/01/15	Not Attaining	5
LOCATION: NEAR BURNSTOWN ALABAMA	N FROM UNNAMED TRIBUT.	ARY NORTH OF COUNTY ROAD 86 TO					
CANEY CREEK	700312	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATE	RS TO CONFLUENCE WITH I	LEITCH MILL BRANCH					
CHAMBERS CREEK	701811	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM TN STATE L	INE TO TN STATE LINE						
CRIPPLE DEER CREEK	701411	701411	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATE	RS TO CONFLUENCE WITH I	LITTLE CRIPPLE DEER CREEK					
HOLLY BRANCH	701211	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: NEAR IUKA FROM	HEADWATERS TO MOUTH A	AT CEDAR CREEK					
INDIAN CREEK	700711	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATE	RS TO MOUTH AT PICKWICI	X LAKE					
LEITCH MILL BRANCH	700314	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATE	RS TO CONFLUENCE WITH (CANEY CREEK					

		TENNESSEE RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE AS	SSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
LITTLE CRIPPLE DEER CREEK	701412	N/A	Aquatic Life Supp	port	11/18/15	Not Attaining	5
LOCATION: NEAR TISHOMINGO FR	OM HEADWATERS TO 1	MOUTH AT CRIPPLE DEER CREEK					
LITTLE YELLOW CREEK	701911	N/A	Aquatic Life Supp	port	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	CANEY CREEK					
PENNYWINKLE CREEK	701511	N/A	Aquatic Life Supp	port	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS T	O ALABAMA STATE LI	NE					

		TOMBIGBEE RIVER	ĸ				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Г ДАТЕ	ASSESSMENT STATUS	CATEGORY
ABERDEEN LAKE	803111	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR ABERDEEN							
ALAMUCHEE CREEK	818411	818411	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: FROM LITTLE ALMUC	HEE CREEK TO ALABAM	IA STATE LINE					
BAY SPRINGS LAKE	800111	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: RESERVOIR OF THE U	PPER TENN-TOM WATEF	RWAY, TISHIAMINGO COUNTY					
BIG BROWN CREEK	800711	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: FROM CONFLUENCE O CREEK	OF HURRICANE CREEK T	O CONFLUENCE WITH LITTLE BROWN	Secondary C	ontact	11/24/09	Attaining	2
BIG REED CREEK	817811	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT PONTA C	REEK					
BOGUEFALA CREEK	819211	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS	TO CONFLUENCE WITH	GREENWOOD CREEK					
BRIAR CREEK	802212	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS	TO MOUTH AT BULL MC	DUNTAIN CREEK					

		TOMBIGBEE RIVER	Ł				
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS C	ATEGORY
BROWNING CREEK	812913	812913	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS	S TO MOUTH AT NOXUBEI	ERIVER					
BUTTAHATCHEE RIVER	806711	N/A	Aquatic Life		12/01/15	Not Attaining	5
LOCATION: FROM CONFLUENCE	WITH SIPSEY CREEK TO I	MWS 8068 BOUNDARY	Secondary C	Contact	10/20/15	Attaining	2
CEDAR CREEK	810711	MS031CE	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Completed	d 4A
LOCATION: FROM HEADWATERS	S TO MOUTH AT ALICEVIL	LE POOL ON TENN-TOM WATERWAY					
CHIWAPA CREEK	805611	N/A	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Not Appli	cable 4C
LOCATION: FROM BOUNDARY W TALLABINNELA CRE		UENCE WITH TUBBALUBBA CREEK AND					
CHUQUATONCHEE CREEK	807011	MS020CE	Aquatic Life	Support	12/02/15	Not Attaining, Tmdl Completed	d 4A
LOCATION: FROM MWS 8069 BO	JNDARY TO MWS 8208 BO	UNDARY					
COOPER CREEK	809913	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: NEAR STEEN FROM C CREEK	CONFLUENCE OF MAYHE	W CREEK TO CONFLUENCE WITH YELLOW					
FULLER CREEK	804112	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS	S TO MOUTH AT TOWN CR	EEK					

		TOMBIGBEE RIVER					
WATERSHED NAME ASSE	ESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
GOODFOOD CREEK 80701	12	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO MOU	JTH AT CHUQUAT	ONCHEE CREEK					
GREENWOOD CREEK 80261	11	802611	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO MOU	JTH AT BOGUEFAI	LA CREEK	Secondary C	Contact	11/23/09	Not Attaining, Tmdl Comple	eted 4A
GUM CREEK 80191	13	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM ALABAMA STATE LINE BOUNDARY	TO CONFLUENCE	E WITH CHUBBY CREEK AT MWS8020					
HANG KETTLE CREEK 80421	12	MS011E	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO CON	FLUENCE WITH T	OWN CREEK					
HOWARD CREEK 81001	12	N/A	Aquatic Life	Support	12/02/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO UNNA	AMED TRIBUTAR	Y NEAR MOUNT PLEASANT CHURCH					
JOES CREEK 81391	11	MS083M	Aquatic Life	Support	12/02/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO CON	FLUENCE AT NOX	UBEE RIVER					
LAKE TOM BAILEY 81811	13	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: AT TOOMSUBA FROM OUTFLO	OW TO TOOMSUB	A CREEK					

		TOMBIGBEE RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
LOAKFOMA LAKE 8	812911	N/A	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: NEAR OKTOC NEAR DAM							
LONG BRANCH 8	808512	N/A	Aquatic Life	Support	11/02/15	Not Attaining	5
LOCATION: NEAR STARKVILLE FROM	1 HEADWATERS TO TI	RIM CANE CREEK					
LONG BRANCH 8	808312	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO P	MOUTH AT LINE CREE	EK					
LUXAPALLILA CREEK 8	821611	N/A	Aquatic Life S	Support	12/01/15	Not Attaining	5
LOCATION: FROM MWS 8094 BOUNDA CREEK	ARY NEAR MS/AL STA	TE LINE TO CONFLUENCE AT YELLOW					
MACEDONIA CREEK 8	814211	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM CONFLUENCE WITH	H RUNNING WATER C	REEK TO MOUTH AT NOXUBEE RIVER					
MANTACHIE CREEK 8	801611	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO I	HWY 371						
MAYHEW CREEK 8	809914	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO P	MOUTH AT COOPER C	REEK					

		TOMBIGBEE RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
MCCRARY CREEK	810111	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM AL STATE LINE	FO MOUTH AT LUXAPA	LILLA CREEK					
MCKINLEY CREEK	804011	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM 8039 MWS BOUN	DARY TO MOUTH OF T	OMBIGBEE RIVER					
MILL CREEK	811911	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT NOXUBE	E RIVER					
NOXUBEE RIVER	811811	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS A	T LAKE CHOCTAW TO	8119 MWS BOUNDARY					
PANTHER CREEK	802012	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT GUM CRE	EEK					
PAWTICFAW CREEK	817411	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM 8172 MWS BOUN	DARY MOUTH AT SUCA	ARNOOCHEE RIVER					
POOL C	819312	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR FULTON NEAR IN	NLET TO FULTON POOL						

		TOMBIGBEE RIVER					
WATERSHED NAME AS	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
POOL C 81	9313	N/A	Aquatic Life S	Support	12/02/15	Attaining	2
LOCATION: AT FULTON NEAR FULTON	LOCK & DAM						
PUNCHEON CREEK 80	1613	N/A	Aquatic Life S	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT MANTACH	IE CREEK					
RAY BRANCH 80	1912	N/A	Aquatic Life S	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT GUM CREE	K					
RED BUD CREEK 80	0312	800312	Aquatic Life S	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	OUTH AT TENNESSE	E-TOMBIGBEE WATERWAY					
SAND CREEK 80	1612	N/A	Aquatic Life S	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT MANTACH	IE CREEK					
SAND CREEK 82	1212	N/A	Aquatic Life S	Support	11/19/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO CO	ONFLUENCE WITH O	LD FIELD CREEK					
SHY HAMMOCK CREEK 81	5711	MS045E	Aquatic Life S	Support	12/02/15	Not Attaining, Tmdl Compl	eted 4A
LOCATION: NEAR GILES FROM HEADW	ATERS TO PUSHACC	DONA CREEK					

TOMBIGBEE RIVER											
ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	NT DATE	ASSESSMENT STATUS	CATEGORY					
802411	N/A	Aquatic Life	Support	11/19/15	Attaining	2					
ROM HEADWATERS TO CONFLU	JENCE WITH JIM'S CREEK										
804213	804213	Aquatic Life	Support	11/19/15	Not Attaining	5					
FROM HEADWATERS TO CONF	LUENCE WITH HANG KETTLE CREEK										
804313	MS012E	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Comple	eted 4A					
S AIRFORCE BASE FROM HEADW	VATERS TO COLUMBUS LAKE										
805711	MS015TE	Aquatic Life	Support	12/02/15	Not Attaining, Tmdl Comple	eted 4A					
JENCE WITH BALLS BRANCH TO	O CONFLUENCE WITH CHIWAPA CREEK										
820211	N/A	Aquatic Life	Support	12/01/15	Not Attaining	5					
VS 8201 BOUNDARY TO THE CON	IFLUENCE WITH SHOAL CREEK										
813812	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5					
SVILLE FROM HEADWATERS TO	NOXUBEE RIVER										
818811	818811	Aquatic Life	Support	11/19/15	Not Attaining	5					
ATERS TO MOUTH AT TWENTY	MILE CREEK										
	802411 ROM HEADWATERS TO CONFLU 804213 I FROM HEADWATERS TO CONFI 804313 S AIRFORCE BASE FROM HEADW 805711 JENCE WITH BALLS BRANCH TO 820211 VS 8201 BOUNDARY TO THE CON 813812 SVILLE FROM HEADWATERS TO 818811	ASSESSMENT UNIT§ 303(d) ID802411N/AROM HEADWATERS TO CONFLUENCE WITH JIM'S CREEK8042138042131 FROM HEADWATERS TO CONFLUENCE WITH HANG KETTLE CREEK804313MS012E804313MS012E805711MS015TE2805711MS015TE2805711MS015TE280211N/A820211N/A813812N/A813812N/ASVILLE FROM HEADWATERS TO NOXUBEE RIVER	ASSESSMENT UNIT§ 303(d) IDUSE802411N/AAquatic LifeROM HEADWATERS TO CONFLUENCE WITH JIM'S CREEK804213Aquatic Life804213804213804213Aquatic Life1 FROM HEADWATERS TO CONFLUENCE WITH HANG KETTLE CREEK804313MS012E804313MS012EAquatic Life804313MS012EAquatic Life804313MS015TEAquatic Life805711MS015TEAquatic Life805711MS015TEAquatic Life805711N/AAquatic Life820211N/AAquatic Life813812N/AAquatic Life813812N/AAquatic Life818811818811Aquatic Life	ASSESSMENT UNIT § 303(d) ID USE ASSESSMENT 802411 N/A Aquatic Life Support Aquatic Life Support ROM HEADWATERS TO CONFLUENCE WITH JIM'S CREEK Aquatic Life Support Aquatic Life Support 804213 804213 Aquatic Life Support Aquatic Life Support 1FROM HEADWATERS TO CONFLUENCE WITH HANG KETTLE CREEK Aquatic Life Support Aquatic Life Support 804313 MS012E Aquatic Life Support Aquatic Life Support S AIRFORCE BASE FROM HEADWATERS TO COLUMBUS LAKE Aquatic Life Support Aquatic Life Support 805711 MS015TE Aquatic Life Support Aquatic Life Support VS 8201 BOUNDARY TO THE CONFLUENCE WITH CHIWAPA CREEK Aquatic Life Support SVILLE FROM HEADWATERS TO NOXUBEE RIVER Aquatic Life Support 813812 N/A Aquatic Life Support SVILLE FROM HEADWATERS TO NOXUBEE RIVER Aquatic Life Support	ASSESSMENT UNIT§ 303(d) IDUSEASSESSMENTDATE802411N/AAquatic Life Support11/19/15ROM HEADWATERS TO CONFLUENCE WITH JIM'S CREEKAquatic Life Support11/19/15804213804213Aquatic Life Support11/19/15804213MS012EAquatic Life Support11/19/15804313MS012EAquatic Life Support11/19/15S AIRFORCE BASE FROM HEADWATERS TO COLUMBUS LAKEAquatic Life Support12/02/15905711MS015TEAquatic Life Support12/02/15JENCE WITH BALLS BRANCH TO CONFLUENCE WITH CHIWAPA CREEKAquatic Life Support12/01/15820211N/AAquatic Life Support12/01/15VS 8201 BOUNDARY TO THE CONFLUENCE WITH SHOAL CREEKAquatic Life Support11/19/15813812N/AAquatic Life Support11/19/15818811818811Aquatic Life Support11/19/15	ASSESSMENT UNIT§ 303(d) IDUSEASSESSMENTDATEASSESSMENT STATUS802411N/AAquatic Life Support11/19/15AttainingROM HEADWATERS TO CONFLUENCE WITH JIM'S CREEKAquatic Life Support11/19/15Not Attaining804213804213Aquatic Life Support11/19/15Not Attaining804313M5012EAquatic Life Support11/19/15Not Attaining, Tmdl Completer804313M5012EAquatic Life Support11/19/15Not Attaining, Tmdl Completer805711MS015TEAquatic Life Support12/02/15Not Attaining, Tmdl Completer805711MS015TEAquatic Life Support12/01/15Not Attaining, Tmdl Completer805711MS015TEAquatic Life Support12/01/15Not Attaining, Tmdl Completer805711N/AAquatic Life Support12/01/15Not Attaining813812N/AAquatic Life Support11/19/15Not Attaining813812N/AAquatic Life Support11/19/15Not Attaining818811818811Aquatic Life Support11/19/15Not Attaining					

TOMBIGBEE RIVER										
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY			
WOODWARD CREEK	815411	MS043E	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Complete	ed 4A			
LOCATION: FROM 8153 MWS BOUN	DARY TO AL STATE LIN	νE								
YAZOO CREEK	817112	N/A	Aquatic Life	Support	11/19/15	Attaining	2			
LOCATION: FROM HEADWATERS T	O MOUTH AT PAWTICF	AW CREEK								
YONABA CREEK	804511	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5			
LOCATION: FROM CONFLUENCE O	F BRIDGE CREEK TO CC	NFLUENCE OF TOWN CREEK								

		YAZOO RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS CA	ATEGORY
ABIACA CREEK	920011	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM CONFLUENCE OF	F COILA CREEK TO MW	'S BOUNDARY 9411					
ARKABUTLA CREEK	912311	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM MWS 9121 TO MY	WS 9124 BOUNDARY						
ASCALMORE CREEK	918411	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	SHOOK CREEK					
BAILEY LAKE	918812	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR WINONA NEAR E	DAM						
BEAR CREEK	913812	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT TOPASHA	AW CREEK CANAL					
BIG BOGUE	917311	917311	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O CONFLUENCE WITH	WILKINS CREEK					
BIG SPRING CREEK	903511	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT TIPPAH R	IVER					

USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
Aquatic Life	Support	12/01/15	Not Attaining, Tmdl Complet	ed 4A
Aquatic Life	Support	11/18/15	Not Attaining, Tmdl Complet	ed 4A
Aquatic Life	Support	11/23/15	Not Attaining	5
Aquatic Life	Support	11/19/15	Not Attaining	5
Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Complet	ed 4A
Aquatic Life	Support	11/23/15	Attaining	2
Secondary Co	ontact	11/23/09	Not Attaining, Tmdl Complet	ed 4A
Aquatic Life	Support	11/18/15	Attaining	2
	Aquatic Life Secondary Co	Aquatic Life Support	Aquatic Life Support 12/01/15 Aquatic Life Support 11/18/15 Aquatic Life Support 11/23/15 Aquatic Life Support 11/19/15 Aquatic Life Support 11/23/15 Aquatic Life Support 11/23/15 Aquatic Life Support 11/23/15 Secondary Contact 11/23/09	Aquatic Life Support 12/01/15 Not Attaining, Tmdl Complet Aquatic Life Support 11/18/15 Not Attaining, Tmdl Complet Aquatic Life Support 11/23/15 Not Attaining Aquatic Life Support 11/23/15 Not Attaining Aquatic Life Support 11/23/15 Not Attaining Aquatic Life Support 11/23/15 Not Attaining, Tmdl Complet Aquatic Life Support 11/23/15 Not Attaining, Tmdl Complet Aquatic Life Support 11/23/15 Not Attaining, Tmdl Complet Aquatic Life Support 11/23/15 Attaining Secondary Contact 11/23/09 Not Attaining, Tmdl Complet

		YAZOO RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
CHERRY CREEK	901212	N/A	Aquatic Life	Support	11/18/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT LAPPATU	BBY CREEK					
COILA CREEK	920012	N/A	Aquatic Life	Support	11/23/15	Attaining	2
LOCATION: FROM MWS BOUNDAR	Y 9199 TO MOUTH AT A	BIACA CREEK					
COWPEN CREEK	914512	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Complete	ed 4A
LOCATION: FROM HEADWATERS T	O MOUTH AT GRENADA	A LAKE FLOOD POOL					
COWPEN CREEK	915312	915312	Aquatic Life	Support	11/13/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O MOUTH AT SKUNA R	IVER					
DUMP LAKE	923011	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR SATARTIA OFF D	UMP LAKE ROAD NEAI	R BOAT RAMP					
EAGLE LAKE	948812	N/A	Aquatic Life	Support	11/30/15	Not Attaining	5
LOCATION: AT EAGLE LAKE BEND	NNW OF PUBLIC BOAT	RAMP					
FANNEGUSHA CREEK	920911	920911	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM HEADWATERS A	T CARROLL/HOLMES C	OUNTY LINE TO MWS BOUNDARY 9211					

YAZOO RIVER										
WATERSHED NAME A	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY			
FANNEGUSHA CREEK 92	21111	N/A	Aquatic Life	Support	11/23/15	Attaining	2			
LOCATION: FROM MWS BOUNDARY 92	209 TO MWS BOUNDA	RY 9212								
GRAHAM MILL CREEK 90	03812	N/A	Aquatic Life	Support	11/18/15	Attaining	2			
LOCATION: FROM HEADWATERS TO M	IOUTH AT LEE CREE	K								
HARD CASH LAKE 94	45611	N/A	Aquatic Life	Support	12/02/15	Attaining	2			
LOCATION: SOUTH OF BELZONI OFF H	WY49W									
HICKAHALA CREEK 9	10511	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Comple	eted 4A			
LOCATION: FROM MWS 9104 TO MOUT	Ή ΑΤ SENATOBIA CA	NAL								
HORSE PEN CREEK 9	14312	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Comple	eted 4A			
LOCATION: FROM HEADWATERS TO M	1WS 9139 BOUNDARY									
JASPER CREEK 90	00511	N/A	Aquatic Life	Support	11/18/15	Not Attaining	5			
LOCATION: NEAR NEW ALBANY FROM	1 HEADWATERS TO N	IOUTH AT LITTLE TALLAHATCHIE RIVER								
JOHNSON CREEK 9	11811	N/A	Aquatic Life	Support	11/16/15	Not Attaining, Tmdl Comple	eted 4A			
LOCATION: FROM HEADWATERS TO M	IWS 9119 BOUNDARY									

	YAZ	OO RIVER				
WATERSHED NAME ASSESSM	ENT UNIT § 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
LAKE HENRY 938312	N/A	Aquatic Life	Support	12/02/15	Not Attaining	5
LOCATION: JUST SOUTH OF BELZONI OFF HWY	49W					
LAPATUBBY CREEK 901311	N/A	Aquatic Life	Support	11/18/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM MWS 9012 BOUNDARY TO M	OUTH AT LITTLE TALLHATCHIE RIVER					
LITTLE BOGUE 917111	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH POWELI	CREEK TO CONFLUENCE WITH BATUP	AN BOGUE				
LITTLE EAGLE LAKE 941712	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: LITTLE EAGLE LAKE IN HUMPHRE	YS COUNTY					
LITTLE TALLAHATCHIE RIVER 904711	N/A	Primary Con	tact (Recr)	11/05/15	Attaining	2
LOCATION: FROM SARDIS LOWER LAKE OUTFA	ALL TO MWS BOUNDARY 9048					
LITTLE TALLAHATCHIE RIVER 901711	N/A	Aquatic Life	Support	12/01/15	Not Attaining	5
LOCATION: FROM CONFLUENCE WITH MUD CR	EEK TO MWS BOUNDARY 9019	Secondary C	ontact	11/24/09	Attaining	2
LITTLE TALLAHATCHIE RIVER 901911	N/A	Aquatic Life	Support	01/22/16	Not Attaining	5
LOCATION: FROM MWS BOUNDARY 9017 TO CO	ONFLUENCE WITH FICE CREEK					

		YAZOO RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
LITTLE TALLAHATCHIE RIVER	900412	MS221E	Aquatic Life S	Support	11/02/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: FROM CONFLUENCE OF C	CANE CREEK TO THE C	CONFLUENCE OF KING CREEK					
LITTLE TALLAHATCHIE RIVER 9	900111	N/A	Aquatic Life S	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS TO 9	9002 MWS						
LITTLE TOPASHAW CREEK	913712	N/A	Aquatic Life S	Support	11/23/15	Not Attaining	5
LOCATION: NEAR WOODLAND FROM	HEADWATERS TO TO	PPASAW CREEK					
LOCKES CREEK 9	901811	N/A	Aquatic Life S	Support	11/23/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO N	MOUTH AT LITTLE TA	ALLAHATCHIE RIVER					
LONG CREEK 9	908511	N/A	Aquatic Life S	Support	11/23/15	Not Attaining, Tmdl Comple	ted 4A
LOCATION: FROM HEADWATERS TO C	CONFLUENCE WITH C	GOODWIN CREEK					
LONG LAKE 9	935711	N/A	Aquatic Life S	Support	12/02/15	Attaining	2
LOCATION: NEAR LOMBARDY AT SOU	UTH END OF LAKE						
LOWER LAKE 9	904712	N/A	Aquatic Life S	Support	12/02/15	Attaining	2
LOCATION: NEAR SARDIS ABOVE WE	IR						

USE Aquatic Life	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
Aquatic Life				CHIEGOKI
	Support	12/02/15	Not Attaining	5
Aquatic Life	Support	12/02/15	Attaining	2
Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Complet	ed 4A
Aquatic Life	Support	11/18/15	Attaining	2
Aquatic Life	Support	12/02/15	Not Attaining, Tmdl Complet	ed 4A
Aquatic Life	Support	12/02/15	Not Attaining	5
Aquatic Life	Support	11/23/15	Not Attaining	5
	Aquatic Life Aquatic Life Aquatic Life	Aquatic Life Support Aquatic Life Support	Aquatic Life Support 11/23/15 Aquatic Life Support 11/18/15 Aquatic Life Support 12/02/15 Aquatic Life Support 12/02/15	Aquatic Life Support 11/23/15 Not Attaining, Tmdl Complet Aquatic Life Support 11/18/15 Attaining Aquatic Life Support 12/02/15 Not Attaining, Tmdl Complet Aquatic Life Support 12/02/15 Not Attaining, Tmdl Complet Aquatic Life Support 12/02/15 Not Attaining

		YAZOO RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
PINEY CREEK	922411	MS366E	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM 9223 MWS TO CO	NFLUENCE WITH YAZO	DO RIVER					
RED BANKS CREEK	910212	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM MWS 9101 BOUN	DARY TO MOUTH AT P	IGEON ROOST CREEK					
ROCK CREEK	911612	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Complete	ed 4A
LOCATION: FROM HEADWATERS T	O MOUTH AT COLDWA	TER RIVER					
ROEBUCK LAKE	938212	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR ITTA BENA			Fish Consum	ption	01/26/10	Not Attaining, Tmdl Complete	ed 4A
SAND CREEK	900913	N/A	Aquatic Life	Support	11/18/15	Attaining	2
LOCATION: FROM HEADWATERS T	O MOUTH AT OKANNA	TIE CREEK					
SENATOBIA CREEK	910711	MS304M1	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Complete	ed 4A
LOCATION: FROM HEADWATERS T	O THE CONFLUENCE W	TTH MATTIC CREEK					
SHELTON CREEK	908411	N/A	Aquatic Life	Support	11/19/15	Not Attaining	5
LOCATION: NEAR CROWDER FROM	I HEADWATERS TO THI	E YOCONA RIVER					

		YAZOO RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMEN	Г ДАТЕ	ASSESSMENT STATUS CATE	GORY
SHORT CREEK	922711	MS368E	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Completed	4A
LOCATION: FROM HEADWATERS T	FO MOUTH AT YAZOO R	IVER					
SHORT FORK CREEK	909413	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM HEADWATERS	TO MOUTH AT COLDWA	ATER RIVER					
SHUTISPEAR CREEK	914011	N/A	Aquatic Life	Support	11/02/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	TO MWS 9139 BOUNDAR	Y AT THE YALOBUSHA RIVER FLOOD PLAIN					
SKUNA RIVER	915413	MS333LSE	Fish Consum	nption	01/25/10	Not Attaining, Tmdl Completed	4A
LOCATION: AT BRUCE FROM PERS	SIMMON CREEK TO MWS	S BOUNDARY 9156	Secondary C	ontact	10/27/15	Attaining	2
SKUNA RIVER CANAL	915311	N/A	Aquatic Life	Support	11/24/15	Not Attaining	5
LOCATION: FROM CONFLUENCE W	VITH OLD RIVER RUN TO	O CONFLUENCE WITH THOMPSONS CREEK					
SNOW LAKE	903011	N/A	Aquatic Life	Support	12/02/15	Attaining	2
LOCATION: NEAR ASHLAND OFF H	IWY 4						
SPLINTER CREEK	907412	N/A	Aquatic Life	Support	11/19/15	Attaining	2
LOCATION: FROM HEADWATERS T	TO MOUTH AT YOCONA	RIVER					

		YAZOO RIVER					
WATERSHED NAME AS	SSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
SPRING BRANCH 94	1411	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM HEADWATERS TO M	OUTH AT MILLSTON	E BAYOU					
THOMPSON CREEK 92	2811	N/A	Aquatic Life	Support	11/23/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	OUTH AT PERRY CRI	EEK					
TILLATOBA CREEK 90	6511	N/A	Aquatic Life	Support	11/19/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM MWS BOUNDARY 900	62 TO CONFLUENCE	OF NORTH FORK TILLATOBA CREEK					
TOPASHAW CREEK 91	3711	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM HEADWATERS TO M	WS BOUNDARY 9138						
TOPASHAW CREEK 91	3811	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Comple	eted 4A
LOCATION: FROM MWS BOUNDARY 913	37 TO MWS BOUNDA	RY 9136					
TURKEY CREEK 91	5911	N/A	Aquatic Life	Support	11/23/15	Attaining	2
LOCATION: FROM HEADWATERS TO M	WS 9160 BOUNDARY						
UNNAMED TRIBUTARY TO LITTLE 90 TALLAHATCHIE RIVER	01713	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: NEAR PINEDALE FROM HEA TRIBUTARY	ADWATERS TO THE (CONFLUENCE WITH UNNAMED					

		YAZOO RIVER					
WATERSHED NAME	ASSESSMENT UNIT	§ 303(d) ID	USE	ASSESSMENT	DATE	ASSESSMENT STATUS	CATEGORY
WHITES CREEK	930111	N/A	Aquatic Life	Support	11/23/15	Not Attaining	5
LOCATION: FROM HEADWATERS T	O THE LAKE CORMORA	ANT BAYOU					
YALOBUSHA RIVER	913311	N/A	Aquatic Life	Support	11/23/15	Not Attaining, Tmdl Compl	eted 4A
LOCATION: FROM CONFLUENCE W	ITH NARON CREEK TO	CONFLUENCE WITH MILES CREEK					
YAZOO RIVER	941212	N/A	Aquatic Life	Support	12/01/15	Attaining	2
LOCATION: FROM THE MSWS9409 B		NFLUENCE OF SNAKE CREEK	Fish Consun	nption	01/25/10	Not Attaining, Tmdl Compl	eted 4A
LOCATION. FROM THE M5W39409 F	SOUNDART TO THE CO	NTLUENCE OF SNAKE CREEK					