



## **NPDES Phase II Stormwater Management Plan**



Prepared for:

Mississippi Department of Transportation

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**TABLE OF CONTENTS**

**1.0 INTRODUCTION..... 1**

1.1 EXECUTIVE SUMMARY ..... 1

1.2 REGULATORY HISTORY ..... 1

1.3 MDOT STORMWATER MANAGEMENT PLAN SCOPE ..... 2

1.4 MDOT ADMINISTRATIVE POLICY ..... 3

1.5 OVERVIEW OF THE REQUIRED MINIMUM MEASURES..... 3

    1.5.1 Public Education (PE):..... 3

    1.5.2 Public Involvement (PI):..... 3

    1.5.3 Illicit Discharges Identification and Elimination (ID): ..... 3

    1.5.4 Construction Site Stormwater Runoff Control (CS): ..... 4

    1.5.5 Post Construction Stormwater Management (PC): ..... 4

    1.5.6 Pollution Prevention / Good Housekeeping (PP):..... 4

1.6 GENERAL PLAN ASSUMPTIONS ..... 4

**2.0 SUMMARY OF 2003-2007 ACCOMPLISHMENTS ..... 5**

2.1 PUBLIC EDUCATION ..... 5

2.2 PUBLIC INVOLVEMENT AND PARTICIPATION..... 5

2.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION ..... 5

2.4 CONSTRUCTION STORMWATER RUNOFF MANAGEMENT..... 5

2.5 POST-CONSTRUCTION STORMWATER RUNOFF MANAGEMENT ..... 6

2.6 POLLUTION PREVENTION / GOOD HOUSEKEEPING ..... 6

**3.0 MINIMUM CONTROL MEASURES (BMPS)..... 7**

3.1 PUBLIC EDUCATION AND OUTREACH ..... 7

3.2 PUBLIC EDUCATION AND OUTREACH RATIONALE STATEMENT ..... 7

3.3 PUBLIC EDUCATION AND OUTREACH SUMMARY ..... 7

3.3 PUBLIC EDUCATION AND OUTREACH BEST MANAGEMENT PRACTICES..... 8

    3.3.1 Materials for Direct Distribution ..... 8

    3.3.2 Stormwater Quality Website ..... 8

    3.3.3 Public Service Announcements..... 9

    3.3.4 Impacts of Illegal Dumping and Littering ..... 9

    3.3.5 Public Education on Construction Activities and New Development Activities ..... 10

    3.3.6 Education of School Children on the Importance of Water Quality..... 10

    3.3.7 Education of MDOT and Contractor Personnel on Erosion and Sediment Control on Construction Sites..... 10

3.4 PUBLIC INVOLVEMENT ..... 15

3.5 PUBLIC INVOLVEMENT RATIONALE STATEMENT ..... 15

3.6 PUBLIC INVOLVEMENT SUMMARY ..... 15

3.7 PUBLIC INVOLVEMENT BEST MANAGEMENT PRACTICES..... 16

    3.7.1 Stormwater Management Plan Committee ..... 16

    3.7.2 Adopt-A-Highway / Adopt-An-Interchange Programs ..... 17

3.8 ILLICIT DISCHARGE DETECTION AND ELIMINATION ..... 20

3.9 ILLICIT DISCHARGE DETECTION AND ELIMINATION RATIONALE STATEMENT..... 20

3.10 ILLICIT DISCHARGE DETECTION AND ELIMINATION SUMMARY ..... 20

3.11 ILLICIT DISCHARGE DETECTION AND ELIMINATION BEST MANAGEMENT PRACTICES ..... 21

    3.11.1 Maintain the MS4 and Outfall Inventory..... 21

    3.11.2 MDOT Dry-Weather Outfall Inspections ..... 21

    3.11.3 Illicit Discharge Employee Training ..... 22

    3.11.4 Illegal Dumping Detection and Reporting ..... 22

3.12 CONSTRUCTION SITE RUNOFF..... 26

3.13 CONSTRUCTION SITE RUNOFF RATIONALE STATEMENT ..... 26

3.14 CONSTRUCTION SITE RUNOFF SUMMARY ..... 26

3.15 CONSTRUCTION SITE RUNOFF BEST MANAGEMENT PRACTICES..... 27

3.15.1	<i>MDOT Construction Personnel Education</i> .....	27
3.15.2	<i>Construction Plans Review</i> .....	27
3.15.3	<i>Construction Inspection Procedures and Standards</i> .....	28
3.15.4	<i>Construction Site Inspections</i> .....	28
3.15.5	<i>Construction Related Public Reporting</i> .....	29
3.16	POST-CONSTRUCTION SITE RUNOFF .....	33
3.17	POST-CONSTRUCTION SITE RUNOFF RATIONALE STATEMENT .....	33
3.18	POST-CONSTRUCTION SITE RUNOFF SUMMARY .....	33
3.19	POST-CONSTRUCTION SITE RUNOFF BEST MANAGEMENT PRACTICES .....	34
3.19.1	<i>Protection of Sensitive and/or Impaired Water Bodies</i> .....	34
3.19.2	<i>Participation in Local Watershed Planning and Modeling</i> .....	34
3.20	POLLUTION PREVENTION / GOOD HOUSEKEEPING .....	36
3.21	POLLUTION PREVENTION / GOOD HOUSEKEEPING RATIONALE STATEMENT .....	36
3.22	POLLUTION PREVENTION / GOOD HOUSEKEEPING SUMMARY .....	36
3.23	POLLUTION PREVENTION / GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES .....	37
3.23.1	<i>Maintenance of Roadways</i> .....	37
3.23.2	<i>Street Sweeping</i> .....	37
3.23.3	<i>Litter and Debris Collection</i> .....	38
3.23.4	<i>Herbicide Application</i> .....	38
3.23.5	<i>Vehicle Maintenance</i> .....	39
3.23.6	<i>Implement a program for Identification, Disposal and Recycling of Potentially Hazardous Materials</i> .....	39
3.23.7	<i>Spill Prevention Plans</i> .....	40
3.23.8	<i>Employee Training</i> .....	41

### **Index of Tables**

TABLE 3.1	PUBLIC EDUCATION AND OUTREACH PROGRAM – IMPLEMENTATION SCHEDULE AND RESPONSIBILITY .....	12
TABLE 3.2	PUBLIC INFORMATION PROGRAM – IMPLEMENTATION SCHEDULE AND RESPONSIBILITY.....	19
TABLE 3.11	ILLICIT DISCHARGE DETECTION AND ELIMINATION – IMPLEMENTATION SCHEDULE AND RESPONSIBILITY ..	24
TABLE 3.15	CONSTRUCTION SITE RUNOFF – IMPLEMENTATION SCHEDULE AND RESPONSIBILITY .....	31
TABLE 3.19	POST-CONSTRUCTION SITE RUNOFF – IMPLEMENTATION SCHEDULE AND RESPONSIBILITY .....	35
TABLE 3.23	POLLUTION PREVENTION / GOOD HOUSEKEEPING – IMPLEMENTATION SCHEDULE AND RESPONSIBILITY .	42

### **Index of Appendices**

APPENDIX 1.0	GLOSSARY OF TERMS .....	45
APPENDIX 2.0	MS4 MAPS .....	48

## **1.0 INTRODUCTION**

### **1.1 EXECUTIVE SUMMARY**

The Mississippi Department of Transportation (MDOT) is pleased to provide this MDOT NPDES Phase II Stormwater Management Plan to the Mississippi Department of Environmental Quality (MDEQ). This plan has been developed to address existing water quality issues and to prevent water quality impairment due to polluted stormwater runoff at existing and future Mississippi Transportation Corridors. The following program represents a revision of the original plan that was permitted during the initial Phase II permitting cycle from 2003-2007 in Mississippi. The next five-year permitting cycle will extend from 2009-2013. This plan has been developed as an issue-specific Five-year Stormwater Phase II Program, and the specific issues to be addressed via the program are as follows:

1. General stormwater runoff pollution typically associated with transportation corridors and activities associated with the development or redevelopment of transportation routes within the State of Mississippi;
2. Maintenance related activities including the application of pesticides, herbicides and fertilizers to roadsides, medians and other areas within established MDOT rights-of-way;
3. Illegal dumping and improper disposal of common waste products that have the potential to adversely affect water quality in State waters;
4. Erosion and sedimentation associated with roadway construction and development and post-construction stormwater management at transportation rights-of-way;
5. Efforts to educate the public on the adverse affects of littering and the potential negative impacts associated with impaired water quality; and
6. Pollution prevention and good housekeeping associated with maintenance facilities and roadway construction.

### **1.2 REGULATORY HISTORY**

In 1987, Congress amended the Clean Water Act (CWA) to require a two-phased comprehensive national program to address stormwater discharges and the associated non-point source pollution occurring as a result of unregulated stormwater discharges. The first phase of the program, commonly referred to as "Phase I" was promulgated on November 16, 1990, (55 FR 47990). Phase I in 40 CFR Parts 9, 122, 123 and 124 requires National Pollution Discharge Elimination System (NPDES) permits for stormwater discharges from priority sources including municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or more, eleven categories of industrial activities, and construction sites that disturb five or more acres of land. In response to this requirement, MDOT developed a Stormwater Pollution Prevention Plan (SWPPP) in October 1992. This SWPPP was subsequently approved by the MDEQ. This document serves as the standard for controlling stormwater runoff from MDOT construction sites that disturb more than five acres.

Phase II, which is the second phase of the stormwater program resulting from the 1987 CWA amendment, expands the existing Phase I Program to include discharges of stormwater from smaller municipalities located within Census-designated urbanized areas and from construction sites that disturb more than one acre of land.

The Stormwater Phase II Rule extends coverage of the NPDES Stormwater Management Program to certain “small” MS4s but takes a different approach than the Phase I Program with respect to how local programs are developed and implemented. The Phase II Program for MS4s is designed to accommodate a general permit approach using a Notice of Intent (NOI) as the permit application. The Phase II Rule automatically covers, on a nationwide basis, all MS4s located within Census-designated urbanized areas. On March 10, 2003, all regulated entities submitted a Stormwater Management Plan along with an NOI to comply with existing State General Permits. All Phase II Plans must, at a minimum, address the following six minimum control measures:

- Public Education and Outreach,
- Public Participation and Involvement,
- Illicit Discharge Detection and Elimination,
- Construction Site Runoff Control,
- Post-Construction Runoff Control, and
- Pollution Prevention / Good Housekeeping.

### **1.3 MDOT STORMWATER MANAGEMENT PLAN SCOPE**

The permitting of MDOT’s small MS4 at state and interstate highways, their rights-of-way, and thoroughfares (including streets, roads, bridges, maintenance facilities, service areas and rest areas) within the jurisdictional boundary of MDOT in the State of Mississippi is required as a result of the U.S. Environmental Protection Agency’s (EPA) Phase II Stormwater Rule. The NPDES final regulation was promulgated on December 8, 1999. Mississippi is a delegated State to implement the NPDES program, and the MDEQ is the permitting authority for the State of Mississippi.

Many MS4s exist partially within designated urbanized areas. The Phase II Rule only requires those portions of the MS4 within the urbanized areas to have MS4 permit coverage. This provision does not apply to those MS4s designated by MDEQ in their entirety. For MDOT, permit coverage must be obtained for the entire counties (including municipalities) located within or partially within urbanized areas. The counties impacted by the MDOT Stormwater Management Plan include DeSoto, Forrest, Hancock, Harrison, Hinds, Jackson, Lamar, Madison, and Rankin. MDOT made an administrative decision to apply the Stormwater Management Plan provisions to the entire MS4 for the following reasons:

- Ease of administration for the MDOT as well as for MDEQ;
- Consistent requirements for developers, agency staff, residents, industries, etc. across MDOT’s jurisdiction;
- A high probability exists for expansion of urbanized areas and the need for coverage in the future;
- Stormwater pollution potential from the urban fringe is very similar to the potential from urban cores; and
- MDEQ may designate the entire MS4 as needing permit coverage due to certain circumstances (e.g., discharge to sensitive waters, existing or potential Total

Maximum Daily Load (TMDL) requirements, high potential for water quality impacts typically associated with certain land uses and a large number of water quality related complaints from certain areas).

#### **1.4 MDOT ADMINISTRATIVE POLICY**

It is the policy of MDOT to require all of its Divisions and District Offices to understand and comply with the contents of the Stormwater Management Plan and the requirements of the NPDES regulations as administered by the MDEQ. This document, along with applicable MDOT design guidelines, will serve as MDOT's standard operating procedures for stormwater management until notified of required changes. This document will be considered as an ongoing or "living" document that may be changed, updated or altered periodically to ensure compliance with the most current regulations or guidance.

#### **1.5 OVERVIEW OF THE REQUIRED MINIMUM MEASURES**

##### **1.5.1 PUBLIC EDUCATION (PE):**

Raising public awareness regarding water quality impairment and providing education to the public are essential to changing the behavior of the general public and users of the MDOT transportation system. Using education materials in conjunction with public service announcements, classroom curriculum, website links, and presentations to civic and community groups will assist in educating a wide range of the population. Education of specific targeted audiences such as contractors and subcontractors will ensure that MDOT's stormwater management policies are carried out consistently throughout the system.

##### **1.5.2 PUBLIC INVOLVEMENT (PI):**

Public awareness of water quality issues and a sense of civic pride can be raised by encouraging public participation and direct involvement in ensuring that established water quality standards are achieved. MDOT's public involvement programs are specifically designed to encourage a sense of pride and to encourage stakeholder involvement within the geographical areas where MDOT's policies are focused.

##### **1.5.3 ILLICIT DISCHARGES IDENTIFICATION AND ELIMINATION (ID):**

MDOT recognizes that illicit discharges may take many forms and may be generated from a variety of sources. The Best Management Practices (BMPs) selected to address illicit discharge detection and elimination are chosen because they provide for a comprehensive approach to identifying and eliminating illicit discharges within and adjacent to MDOT rights-of-way. These BMPs include inspection procedures, collection and inventory of spatial data within regulated areas, and the establishment of detection and reporting procedures for illegal dumping activities. Illicit discharge BMPs are also designed to ensure that employees are properly trained to identify and report the various forms of illicit discharges.

#### **1.5.4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (CS):**

Because of the type and scope of the typical MDOT construction project, it is critical that attention to proper stormwater management begin at the plan development stage and continue throughout the construction process. Strategies focused on construction runoff management are specifically designed to track potential threats to water quality throughout all stages of construction from plan development to project close-out with an emphasis on a successful transition from construction stormwater management to post-construction stormwater management.

#### **1.5.5 POST CONSTRUCTION STORMWATER MANAGEMENT (PC):**

Providing standards and policies in conjunction with providing training and education will allow MDOT to promote measures that will directly address pertinent stormwater related issues once construction is completed. MDOT's plan for post-construction runoff management has a priority focus on long-term maintenance of post-construction BMPs and the protection of sensitive and/or impaired water bodies. It is the intention of MDOT to promote the use of vegetative post-construction BMPs to the greatest extent possible.

#### **1.5.6 POLLUTION PREVENTION / GOOD HOUSEKEEPING (PP):**

Through the Pollution Prevention / Good Housekeeping Minimum Measure MDOT has and will continue to implement an Operations and Maintenance Program directed at ensuring that its internal operations are conducted in such a way as to minimize potentially negative impacts to water quality. Many of the policies and procedures focus on MDOT's internal operations and the maintenance of MDOT facilities, including vehicles, equipment and long-term maintenance of roadways under MDOT's jurisdiction. These policies address issues such as spill prevention and response, vehicle maintenance, application of pesticides and herbicides within MDOT rights-of-way, and employee training. MDOT conducts regular training for employees to ensure that they have the knowledge and tools to properly handle potentially harmful materials, to identify conditions that may lead to water quality impairment, and to properly document and report incidents and occurrences that may contribute to water quality impairment.

### **1.6 GENERAL PLAN ASSUMPTIONS**

The implementation of this Stormwater Management Plan is the responsibility of multiple Divisions within MDOT. No single Division bears the majority of the responsibility in ensuring that all measures are complied with. However, the general coordination, documentation and annual reporting lies entirely with the Roadway Design Division of MDOT with strong support from other Divisions.

## **2.0 SUMMARY OF 2003-2007 ACCOMPLISHMENTS**

### **2.1 PUBLIC EDUCATION**

- MDOT produced nearly 125,000 items of literature, litter bags, coloring books, fact sheets and other educational materials for distribution in local schools, libraries and other public places.
- MDOT prepared an aggressive media campaign titled “I’m not your Mama, Pick it up Mississippi” featuring Pat Fordice as the spokesperson. Over 5,000 radio and television spots have aired in addition to over 500 airings at local movie theaters.
- MDOT conducted nearly 1,000 presentations at local schools, civic organizations and community meetings.
- MDOT created web pages and links for inclusion on the [www.gomdot.com](http://www.gomdot.com) website.

### **2.2 PUBLIC INVOLVEMENT AND PARTICIPATION**

- MDOT personnel attended regular meetings of the various basin teams located within areas of jurisdiction for the purpose of participating in watershed-based planning activities.
- MDOT conducted quarterly SWMP Committee meetings.
- MDOT implemented and promoted the Adopt-A-Highway and Adopt-An-Interchange programs that encouraged direct and hands-on public involvement.

### **2.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION**

- MDOT began the process of developing stormwater management maps that identify sub-basins located within the various watersheds, locations of major road crossings, bridges and outfalls, and transportation networks.
- MDOT established and implemented dry-weather screening policies and procedures including inspection forms and employee training.

### **2.4 CONSTRUCTION STORMWATER RUNOFF MANAGEMENT**

- MDOT developed construction guidelines for BMPs.
- MDOT developed inspection forms and procedures for monitoring sediment and erosion control activities at construction sites.
- MDOT established policies and procedures for contractors and subcontractors that require compliance with general and site-specific permit provisions.
- MDOT established procedures for reporting and tracking of construction activities related to stormwater management.
- MDOT conducted training for agency employees, contractors and subcontractors.

## **2.5 *POST-CONSTRUCTION STORMWATER RUNOFF MANAGEMENT***

- MDOT implemented procedures for construction plan reviews that ensure compliance with agency guidelines for sediment and erosion control.
- MDOT established procedures for the identification of sensitive and/or impaired water bodies that have the potential to be adversely impacted by construction or post-construction conditions.
- MDOT developed strategies for ensuring compliance with MDEQ Total Maximum Daily Load (TMDL) requirements.
- MDOT participated in watershed-based planning through various basin teams located within jurisdictional regions.

## **2.6 *POLLUTION PREVENTION / GOOD HOUSEKEEPING***

- MDOT implemented a regular program of street sweeping that identifies specific street segments to be swept and regular schedules for sweeping of those segments.
- MDOT implemented an aggressive litter collection program that engages local governments as partners in the effort.
- MDOT established standard policies and procedures for the application of herbicides on MDOT rights-of-way. These policies and procedures include guidelines for herbicide applications, standard schedules for application and application reporting procedures.
- MDOT implemented requirements for regular and routine maintenance of all MDOT-owned vehicles and equipment.

### **3.0 MINIMUM CONTROL MEASURES (BMPs)**

#### **3.1 PUBLIC EDUCATION AND OUTREACH**

The Public Education and Outreach minimum measure consists of BMPs that focus on the development and distribution of education materials designed to inform the public about the impacts of contaminated stormwater discharges on local water bodies and cumulative impacts that polluted discharges have on watersheds as a whole. The Public Education and Outreach efforts are also designed to motivate the general public to take active steps to reduce pollutants in stormwater runoff.

#### **3.2 PUBLIC EDUCATION AND OUTREACH RATIONALE STATEMENT**

Each BMP within the Public Education and Outreach Minimum measure was selected using a process of 1) research of local, state, and federal BMP databases, 2) consideration of existing practices with regard to applicability to existing water quality issues, 3) consideration of new practices with regard to economic impacts and impacts of integration into the regulated entity's operation systems, 4) consideration of the selected BMPs' applicability to regulation and general permit provisions, and 5) an analysis of the effectiveness of BMPs included within the first edition of the Five-Year Plan during the 2003-2007 permitting cycle.

#### **3.3 PUBLIC EDUCATION AND OUTREACH SUMMARY**

The Public Education and Outreach Minimum Measure is organized to identify the following:

1. To identify how individuals, households and other stakeholders will be informed about the steps that they can take to reduce stormwater pollution,
2. To identify how individuals, households and other stakeholders will be informed on how they can become involved in MDOT's stormwater management program,
3. To identify specific mechanisms that will be used to reach target audiences, and
4. To identify who the target audiences are for the education programs specified in the education related BMPs.

Targeted audiences are selected based on the regulation requirements and on the stated goal of educating the community about the impacts of contaminated stormwater discharges on local water bodies and on entire watersheds. The Public Education and Outreach program and other BMPs, in combination, are expected to reach all of the constituents within the MS4's permitted boundary over the life of the permitting cycle.

The targeted pollutant sources are sediments generated from construction areas, illicit discharges including litter, hazardous materials potentially transported on roadways, and household hazardous materials. Other targeted pollutants may be of local concern and include specific issues identified within approved TMDLs, 303(d) reports and other regulatory documents.

Evaluations of success of specific BMPs will be established through careful analysis of the measurable goals for each BMP included within the Public Education and Outreach

minimum measure. Each BMP will have a specific measurable goal that is established by discernment of attainable goals for the various BMP implementation steps and the capacity of responsible divisions within the context of financial and human resources to effectively meet stated goals.

### **3.3 PUBLIC EDUCATION AND OUTREACH BEST MANAGEMENT PRACTICES**

#### **3.3.1 MATERIALS FOR DIRECT DISTRIBUTION**

MDOT will develop and disseminate materials for the purpose of educating the public on stormwater quality issues related to the development and maintenance of transportation systems and networks in Mississippi. Specific to education materials development and distribution, MDOT will:

- A. Review the existing list of subjects and update, modify, or edit as warranted to ensure that intended messages are part of the Public Education and Outreach Program Element.
- B. Distribute the remainder of existing materials prior to making changes and producing new materials.
- C. Review the distribution location list for relevance, appropriateness and quantities of materials taken from each location. The list of locations will be modified based on the above mentioned parameters.
- D. Review and update the existing materials posting schedule to ensure that it is consistent with the implementation of other BMPs included in the revised SWMP.
- E. Post materials at selected locations in accordance with the identified schedule.
- F. Maintain and document records of the quantity of materials posted and taken from each location.
- G. Include the number of selected locations and quantities of materials posted in its annual report to MDEQ.

#### **3.3.2 STORMWATER QUALITY WEBSITE**

MDOT will continue to maintain the section of the [www.gomdot.com](http://www.gomdot.com) website to educate the public on water quality issues and to provide a mechanism to receive feedback from the public on water quality issues of concern. Through this BMP, MDOT will

- A. Review the existing list of subjects and update, modify, or edit as warranted to ensure that intended messages are part of the Public Education and Outreach Program Element.
- B. Post new information to the website based on an identified schedule and based on the availability of new information.

- C. Maintain records of website traffic specific to the stormwater pages using a sign-in log or hit counter.
- D. Report website traffic in its annual report to MDEQ.

### **3.3.3 PUBLIC SERVICE ANNOUNCEMENTS**

MDOT has a number of public service announcements (PSAs) that focus on the impacts of stormwater runoff on local water bodies and steps the public can take to reduce stormwater pollution. These PSAs are aired through a variety of media and include subjects such as anti-littering campaigns and general stormwater quality issues. During this Five-year permitting cycle, MDOT will:

- A. Review existing PSAs to ensure that they are relevant to current stormwater and water quality issues.
- B. Develop new or modify existing PSAs as needed to ensure relevancy.
- C. Continue to broadcast PSAs through local broadcast media, radio stations, and other venues.
- D. Maintain records of the type of PSAs and the frequency of broadcasting as well as the specific markets in which PSAs are aired.
- E. Report the type of PSAs and the frequency of broadcasting in its annual report to MDEQ.

### **3.3.4 IMPACTS OF ILLEGAL DUMPING AND LITTERING**

Educating the public on the impacts of illegal dumping and littering is critical to ensure the cleanliness and beauty of Mississippi's transportation corridors. MDOT has developed successful education materials and programs that focus on the harmful impacts of illegal dumping and littering and that provide mechanisms for the public to report incidents of dumping and littering. To further insure the success of this program, MDOT will:

- A. Update existing information on illegal dumping and littering that is currently part of existing public education materials to ensure relevance to current issues.
- B. Continue to distribute public education materials that describe the harmful impacts of dumping and littering on local water bodies based on prescribed distribution schedules.
- C. Maintain records on the quantity and type of public education materials that focus on the harmful impacts of illegal dumping and litter.
- D. Report the quantity and type of illegal dumping and littering educational materials distributed in its annual report to MDEQ.

### **3.3.5 PUBLIC EDUCATION ON CONSTRUCTION ACTIVITIES AND NEW DEVELOPMENT ACTIVITIES**

MDOT has active construction taking place in the form of new projects or system maintenance almost continuously. Because of the frequency of construction activities, it is important that MDOT has a mechanism in place to inform the public on existing or pending construction activities and to identify steps that the public can take to report potential construction site runoff problems. During this Five-year Permitting Cycle, MDOT will:

- A. Update existing educational materials that focus on the mechanisms for notifying the public of existing or pending construction projects that the procedures for identifying and reporting potential situations that could lead to water quality impairment.
- B. Distribute these materials based on a prescribed distribution schedule.
- C. Maintain records of the quantity and type of construction related public education materials distributed.
- D. Report the quantity and type of construction related public education materials distributed in its annual report to MDEQ.

### **3.3.6 EDUCATION OF SCHOOL CHILDREN ON THE IMPORTANCE OF WATER QUALITY**

MDOT takes steps to ensure that its education messages are received by a broad audience. One focus group that MDOT attempts to reach with its water quality message is school-aged children. Through its efforts to educate school children, MDOT will:

- A. Review existing programs, presentations and materials targeted towards school children and update to ensure relevancy to current issues.
- B. Continue to use MDOT Anti-litter Coordinators located in each District to educate children on the impacts of litter on the environment.
- C. Make training available to teachers through a hands-on learning program that includes activities related to environmental issues such as water quality and soil erosion.
- D. Maintain records of the quantity of projects conducted under this program.
- E. Report the quantity of projects conducted under this program in its annual report to MDEQ.

### **3.3.7 EDUCATION OF MDOT AND CONTRACTOR PERSONNEL ON EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES**

In order to ensure that MDOT Construction Supervisors and construction personnel are kept informed on the latest agency policies and procedures specific to sediment and erosion control on construction sites, MDOT has developed educational programs

designed to communicate sound principles of sediment and erosion control. To continue this program, MDOT will:

- A. Review and update existing education presentations and programs targeting MDOT and contractor personnel on the proper design, selection, implementation and maintenance of erosion and sediment controls on construction sites. Training will be targeted to MDOT Construction Supervisors.
- B. Continue to implement the above mentioned training program for MDOT and contractor personnel on an annual basis.
- C. Report the quantity of MDOT and Contractor personnel trained in its annual report to MDEQ

**Table 3.1 Public Education and Outreach Program – Implementation Schedule and Responsibility**

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.3.1 Materials for Direct Distribution</b>											
A. Review and update the existing topics to be addressed through educational materials development and distribution	●								●		
B. Distribute the remainder of existing materials	●	●	●	●	●				●		
C. Review and update the distribution location list	●	●	●	●	●				●		
D. Review and update the materials posting schedule	●	●	●	●	●				●		
E. Post materials at selected locations in accordance with the identified schedule	●	●	●	●	●				●		
F. Maintain and document records of the quantity of materials distributed	●	●	●	●	●				●		
G. Report on the quantity of materials distributed in the annual report	●	●	●	●	●				●	●	
<b>3.3.2 Stormwater Quality Website</b>											
A. Review and update the existing topics to be included on the website	●								●		●
B. Post new information to the website based on identified schedules and availability of new information	●	●	●	●	●				●		●
C. Maintain records of website traffic specific to stormwater pages	●	●	●	●	●				●		●
D. Report website traffic in the annual report	●	●	●	●	●				●	●	●
<b>3.3.3 Public Service Announcements</b>											
A. Review existing PSAs to ensure relevancy to current issues	●								●		
B. Develop new or modify existing PSAs as needed	●	●	●	●	●				●		
C. Continue to broadcast PSAs through local broadcast media, radio stations and other venues	●	●	●	●	●				●		
D. Maintain records of the types of PSAs and the frequency of broadcasting of PSAs	●	●	●	●	●				●		
E. Report the type and the frequency of broadcasting of PSAs in the Annual Report	●	●	●	●	●				●	●	

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.3.4 Impacts of Illegal Dumping and Littering</b>											
A. Update existing educational materials on illegal dumping and littering									●		
B. Continue to distribute public education materials focused on impacts of dumping and littering									●		
C. Maintain records on the quantity and type of materials distributed that focus on dumping and littering									●		
D. Report the quantity and type of illegal dumping and littering educational materials in the Annual Report									○	●	
<b>3.3.5 Public Education on Construction Activities and New Development Activities</b>											
A. Update existing educational materials that focus on construction and new developments									●		
B. Distribute construction education materials based on prescribed schedules									●		
C. Maintain records on the number and type of construction related materials distributed									●		
D. Report the quantity and type of construction related public education materials distributed in the Annual Report									○	●	
<b>3.3.6 Education of School Children on the Importance of Water Quality</b>											
A. Review existing programs to ensure relevancy									●		
B. Continue the use of Anti-Litter Coordinators in each District to educate school children									●		
C. Make training available to teachers using hands-on learning programs related to environmental issues									●		
D. Maintain records of the quantity of projects conducted under this program									●		
E. Report the quantity of projects conducted under this program in the Annual Report									○	●	
<b>3.3.7 Education of MDOT and Contractor Personnel on Erosion and Sediment Controls on Construction Sites</b>											
A. Review and update existing education presentations and programs for MDOT and contractor personnel and Supervisors						○		●			
B. Continue to implement the MDOT and contractor personnel training on an annual basis						○		●			

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
C. Report the quantity of MDOT and Contractor personnel trained in the Annual Report						●		●		●	



Continuing activity, reviewed or revised as needed throughout implementation

One-time activity to develop or implement a measurable goal

- Individual or department to take lead in the development or implementation of an activity.
- ◐ Individual or department to provide strong support in the development or implementation of an activity.
- Individual or department to review and provide comments and guidance during the development or implementation of an activity.

**“Other” indicates participation from the IT and Website Development Divisions**

### **3.4 PUBLIC INVOLVEMENT**

The Public Involvement minimum measure consists of BMPs that focus on creating opportunities for the public to get directly involved in implementation of the MDOT Stormwater Management Program. This minimum measure also creates opportunities for the public to get involved in activities that directly benefit the environment and lead to improvements in water quality.

Through the mechanism of public notices, MDOT will notify the public of opportunities to participate in water quality improvement activities and implementation of the SWMP by:

- A. MDOT will provide public notice of prescheduled quarterly meetings and the June Stakeholder Meeting.
- B. Public notice will be accomplished through announcements on the [www.gomdot.com](http://www.gomdot.com) website, public service announcements to be aired within the MS4 regions and legal advertisements to be posted in the four primary newspapers within the MS4 regions. These newspapers include the Sun Herald on the coast, the Hattiesburg American in the Pine Belt Region, the Clarion Ledger in the Jackson Metro Area and the Commercial Appeal in the DeSoto County MS4 region.

### **3.5 PUBLIC INVOLVEMENT RATIONALE STATEMENT**

Each BMP within the Public Involvement Minimum Measure was selected using a process of 1) research of local, state, and federal BMP databases, 2) consideration of local practices with regard to applicability to existing water quality issues, 3) consideration of new practices with regard to economic impacts and impacts of integration into the regulated entity's operation systems, 4) consideration of the selected BMPs' applicability to regulation and general permit provisions, and 5) an analysis of the effectiveness of BMPs included within the first edition of the Five-Year Plan during the 2003-2007 permitting cycle.

### **3.6 PUBLIC INVOLVEMENT SUMMARY**

The Public Involvement Minimum Measure is organized to identify the following:

1. To identify how individuals, households, and other stakeholders will be notified of and provided opportunities to participate in activities related to the development and implementation of the MDOT Stormwater Management Plan,
2. To provide opportunities for a variety of stakeholder groups to participate in the implementation processes and improvement of water quality, and
3. To identify specific public involvement activities that have relevance within the context of implementation of the SWMP and that provide benefits in terms of improved water quality within local watersheds.

Targeted participants were selected based on the regulation requirements and on the stated goal of creating opportunities for hands-on involvement in the implementation of the SWMP and the improvement of water quality on the local level. The Public

Involvement Program and other BMPs, in combination, are expected to reach constituents within the MS4s permitted boundaries over the life of the permitting cycle.

Evaluations of the success of specific Public Involvement BMPs will be established through careful analysis of the measurable goals for each BMP included within the Public Involvement Minimum Measure. Each BMP will have a specific measurable goal that is established by discernment of attainable goals for the various BMP implementation steps and the capacity of responsible divisions within the context of financial and human resources to effectively meet stated goals.

### **3.7 PUBLIC INVOLVEMENT BEST MANAGEMENT PRACTICES**

#### **3.7.1 STORMWATER MANAGEMENT PLAN COMMITTEE**

To ensure efficient implementation of all SWMP goals and objectives, MDOT created a SWMP Committee designed to provide general internal oversight over the implementation of the SWMP. The SWMP Committee is made up of members of various Divisions within MDOT and generally meets on a quarterly basis. In order to continue success of this BMP through the next five-year permitting cycle, MDOT will:

- A. Review the list of BMPs which are included in the SWMP and allow local committee review of the following types of items:
  - a. Public education materials,
  - b. Local illicit discharge elimination regulations and investigation methods,
  - c. Construction guidance materials, permitting procedures and inspection procedures,
  - d. Post-construction BMPs and maintenance guidance information, and
  - e. Feedback on good housekeeping and pollution prevention practices and training.
- B. Consider expansion of the SWMP Committee by determining if additional MDOT Divisions should be involved in the process and by providing notification of meetings to the general public through regular notice procedures.
- C. Participate in the Mississippi Basin Management Approach process as applicable through coordination with each appropriate DEQ Basin Committee. Applicable Basin Teams include:
  - a. Big Black River Basin
  - b. Coastal Streams Basin
  - c. North Independent Streams Basin
  - d. Pascagoula River Basin
  - e. Pearl River Basin
  - f. South Independent Streams Basin
  - g. Yazoo River Basin

Please refer to Appendix 2.0 for a map of the above mentioned basins.

D. The SWMP Committee will meet once per quarter year according to the following schedule with the June meeting (2<sup>nd</sup> Quarter) being held as a public meeting:

1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
1 <sup>st</sup> Monday in March	1 <sup>st</sup> Monday in June	2 <sup>nd</sup> Monday in September	1 <sup>st</sup> Monday in December

C. The annual meeting schedule will be published once per year in local newspapers with general circulation in each area of the MS4. The June meeting will be announced via public notice at areas within each MS4. Public notice will be accomplished through announcements on the [www.gomdot.com](http://www.gomdot.com) website, public service announcements to be aired within the MS4 regions and legal advertisements to be posted in the four primary newspapers within the MS4 regions. These newspapers include the Sun Herald on the coast, the Hattiesburg American in the Pine Belt Region, the Clarion Ledger in the Jackson Metro Area and the Commercial Appeal in the DeSoto County MS4 region.

E. Record attendance and take minutes at each meeting.

F. Maintain records of agenda, attendance and minutes for each meeting.

G. Report the number of meetings and subjects presented in its annual report to MDEQ.

### 3.7.2 ADOPT-A-HIGHWAY / ADOPT-AN-INTERCHANGE PROGRAMS

The Adopt-A-Highway program provides an innovative solution to our state’s highway litter problem by providing private and civic organizations with the opportunity to become involved in the preservation of Mississippi’s natural beauty. Through the program, a private or civic group adopts at a minimum, a one-mile segment of Mississippi highway and provides manpower to remove litter from the segment right-of-way on a regular basis. In turn, MDOT provides a road sign with the organization’s name. MDOT also provides logistical support during litter collection activities such as providing trash bags, gloves, safety vests, and “workers ahead” signs. Once cleanup activities have concluded, MDOT collects the full trash bags for proper disposal.

In similar fashion, the Adopt-An-Interchange program allows municipalities the opportunity to showcase their civic pride by adopting an interchange located within their city. Through the adoption program, the adopting municipality agrees to perform certain maintenance functions at the interchange including regular mowing, litter collection, and planting and landscape management. In turn, MDOT provides municipalities with trash bags, safety vests and “workers ahead” signs. MDOT also provides for the placement of specially designed Mississippi logo signs at the interchange as an indication of the participating municipality’s commitment to excellence. To ensure continued success of these programs through the next five-year permitting cycle, MDOT will:

A. Identify target highways, highway segments, or interchanges to include in the Adopt-A-Highway or Adopt-An-Interchange Programs. The identification of targeted highways or interchanges will focus on highways, segments or interchanges not currently adopted and those that have been developed as part

- of construction activities taking place since the beginning of the first five-year permitting cycle.
- B. Seek to identify additional local public, private, or civic organizations that may be interested in program participation.
  - C. Review and update as needed, existing guidelines and schedules for Adopt-A-Highway and Adopt-An-Interchange cleanup events.
  - D. Invite identified groups to participate in the Adopt-A-Highway and Adopt-An-Interchange Programs.
  - E. Form adoption agreements with groups willing to participate in the programs.
  - F. Provide the necessary support to the volunteer groups for cleanup and/or maintenance activities.
  - G. Maintain records of the number of highway segments and/or interchanges under adoption, the number of cleanup or maintenance events conducted and the volume of litter removed at each event.
  - H. Report on the number of highway segments and/or interchanges under adoption, the number of cleanup or maintenance events conducted and the volume of litter removed in aggregate in its annual report to MDEQ.

**Table 3.2 Public Information Program – Implementation Schedule and Responsibility**

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.7.1 Stormwater Management Plan Committee</b>											
A. Review the list of BMPs that would benefit from review and oversight by the SWMP Committee	■					●	●	●	●	●	
B. Consider expansion of the SWMP Committee	■					●	●	●	●	●	
C. Participate in the Mississippi Basin Management Approach Process	■	■	■	■	■	●	●	●	●	●	
D. Conduct Quarterly Meetings according to the prescribed meeting schedule	■	■	■	■	■	●	●	●	●	●	
E. Record attendance and take minutes at each meeting	■	■	■	■	■	●	●	●	●	●	
F. Maintain records of agenda, attendance, and minutes for each meeting	■	■	■	■	■	●	●	●	●	●	
G. Report the number of meetings and subjects presented in the Annual Report	■	■	■	■	■	●	●	●	●	●	
<b>3.7.2 Adopt-A-Highway / Adopt-An-Interchange Programs</b>											
A. Identify target highways, segments and interchanges with a focus on those newly developed or currently not adopted	■					○	○	○	●		●
B. Identify potential participating groups or organizations	■					●	●	●	●	●	●
C. Review and update existing guidelines and schedules for cleanup and maintenance events	■							○	●		●
D. Invite identified groups to participate	■	■	■	■	■				●		●
E. Form adoption agreements with groups willing to participate in the programs	■	■	■	■	■				●		●
F. Provide the necessary support to the volunteer groups for cleanup and/or maintenance activities	■	■	■	■	■			○	●		●
G. Maintain records of program activities	■	■	■	■	■				●		●
H. Report program activities conducted in the Annual Report	■	■	■	■	■				●	●	●

- Continuing activity, reviewed or revised as needed throughout implementation
- One-time activity to develop or implement a measurable goal
- Individual or department to take lead in the development or implementation of an activity.
- Individual or department to provide strong support in the development or implementation of an activity.
- Individual or department to review and provide comments and guidance during the development or implementation of an activity.

**“Other” indicates participation from the District Anti-Litter Coordinators.**

### **3.8 *ILLICIT DISCHARGE DETECTION AND ELIMINATION***

The Illicit Discharge Detection and Elimination Minimum Measure consists of BMPs that focus on the detection and elimination of illicit discharges into the MS4. An illicit discharge is defined as any discharge to an MS4 that is not composed entirely of stormwater except those discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the MS4) and those non-stormwater discharges identified as expressly exempt from these requirements.

### **3.9 *ILLICIT DISCHARGE DETECTION AND ELIMINATION RATIONALE STATEMENT***

Each BMP within the Illicit Discharge Detection and Elimination Minimum Measure was selected using a process of 1) research of local, state, and federal BMP databases, 2) consideration of local practices with regard to applicability to existing water quality issues, 3) consideration of new practices with regard to economic impacts and impacts of integration into the regulated entity's operation systems, 4) consideration of the selected BMP's applicability to regulation and the general permit provisions, and 5) an analysis of the effectiveness of BMPs included within the first edition of the Five-Year Plan during the 2003-2007 permitting cycle.

### **3.10 *ILLICIT DISCHARGE DETECTION AND ELIMINATION SUMMARY***

The Illicit Discharge Detection and Elimination Minimum Measure is organized to identify the following:

1. Methods, procedures and protocols for mapping the MS4 conveyance systems, major road crossings and incidents of illicit discharge and illegal dumping within the MS4 transportation route rights-of-way,
2. Methods, procedures and protocols for conducting, reporting and documenting dry-weather screening inspections in the MS4,
3. Methods, procedures and protocols for identifying, reporting and mitigating illegal dump sites, and
4. Procedures for educating and training agency employees on the proper methods, procedures and protocols for successful BMP implementation.

Evaluations of the success of specific BMPs will be established through careful analysis of the measurable goals for each BMP included within the Illicit Discharge Detection and Elimination Minimum Measure. Each BMP will have a specific measurable goal that is established by discernment of attainable goals for the various BMP implementation steps and the capacity of responsible divisions within the context of financial and human resources to effectively meet stated goals.

### **3.11 *ILLICIT DISCHARGE DETECTION AND ELIMINATION BEST MANAGEMENT PRACTICES***

#### **3.11.1 MAINTAIN THE MS4 AND OUTFALL INVENTORY**

During the first Five-Year Permitting Cycle, MDOT began the process of collecting and assembling spatial data depicting the distribution of the MS4's conveyance systems and outfalls. Data integrated during the first Five-Year Permitting Cycle included MS4 receiving streams, stormwater outfalls and permit coverage areas. To effectively continue the efforts of mapping the MS4s, MDOT will:

- A. Update maps to reflect new transportation routes developed since the issuance of the first Phase II Stormwater Permit.
- B. Update maps to reflect major stream crossings and other outfalls potentially impacted by new transportation routes.
- C. Update maps as new data becomes available. Examples of new data to be incorporated into the maps include: sub-watershed boundaries, impaired waterways, locations of TMDL regulated stream segments and other data pertinent to stormwater management and water quality.
- D. Develop a consistent method for updating and maintaining the MS4 Map.
- E. Include the number of new outfall locations identified through this effort in its annual report to MDEQ.

#### **3.11.2 MDOT DRY-WEATHER OUTFALL INSPECTIONS**

During the initial permitting cycle, MDOT began the process of conducting routine dry-weather screening inspections throughout the designated MS4s. Because of the large size of MDOT's program coverage area and the primary function of the agency, the consistent implementation of the dry-weather screening process was difficult to implement. Since dry-weather screening is also conducted by the thirty-two Phase II regulated cities and counties in Mississippi, there exists a level of duplication of effort with respect to dry-weather screening. In an effort to make the process and results more efficient and effective, MDOT will:

- A. Develop and implement an incident-based dry-weather screening process. The process will be primarily driven by complaints received and by trained agency personnel identifying and reporting illicit discharges through the course of conducting their stated job functions.
- B. Create and conduct an intensive training program targeting all agency field supervisory employees. Training will specifically address the identification, reporting, documentation, and mitigation of illicit discharges. Training will be conducted within each MDOT District one time per year (See Section 3.11.3 for additional details).

- C. Develop a system for tracking and reporting non-stormwater discharges that begins at discharge identification and documents incident-specific activities including identification, reporting, mitigation actions, and communication to the appropriate affected county or municipal government. The tracking system will include creating and periodically updating a map file that includes geographic locations of complaints.
- D. Address illicit discharges that encroach upon MDOT rights-of-way as required in MDOT Rule #941-7501-09015, "Removal of Encroachments from Highway Rights-of-Way.
- E. Conduct follow-up inspections of non-stormwater discharges identified and reported.
- F. Document the number of outfalls screened and the number of non-stormwater discharges identified and reported on in its annual report to MDEQ.

### **3.11.3 ILLICIT DISCHARGE EMPLOYEE TRAINING**

MDOT is promoting a modified BMP for conducting dry-weather screening. The successful implementation of the dry-weather screening BMP will rely heavily on properly trained personnel. To ensure that training is properly developed and implemented, MDOT will:

- A. Develop a new training program that focuses specifically on the dry-weather screening process and the identification and reporting of illicit discharges.
- B. Establish a training schedule that ensures that each MDOT District Office receives training at least once per year.
- C. Implement the training schedule as established. The training schedule for year one will include training at all district offices. Training in subsequent years will include refresher training and training of new employees.
- D. Report on the number of training sessions conducted annual as well as the number of employees trained in its annual report to MDEQ.

### **3.11.4 ILLEGAL DUMPING DETECTION AND REPORTING**

Similarly to the dry-weather screening process, MDOT desires to minimize incidents of illegal dumping and to maximize the agency's ability to respond, report and mitigate incidents of illegal dumping. To ensure successful achievement of this goal, MDOT will:

- A. Include illegal dumping in the dry-weather screening process and reporting and documentation procedures.
- B. Implement procedures for removal of illegal dump sites within the MDOT's rights-of-way and for notification to the appropriate regulatory authority of repeat offenders.

- C. Implement a system to track occurrences of illegal dumping.
- D. Include illegal dumping identification and reporting in the training for illicit discharges and dry-weather screening as described in Section 3.11.3.
- E. Report on the number of illegal dumps identified and reported in its annual report to MDEQ.

**Table 3.11 Illicit Discharge Detection and Elimination – Implementation Schedule and Responsibility**

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.11.1 Maintain the MS4 and Outfall Inventory</b>											
A. Update maps with new corridors and transportation routes						●	○	●	○		●
B. Update maps to include new crossings created by newly developed transportation routes						●	○	●	○		●
C. Update maps to include new data such as sub-watersheds, impaired waterways, locations of TMDLs, etc.						●	○	●	○		●
D. Develop and implement procedures for periodic map review and updates						●	○	●	○		●
E. Report the development or inclusion of new map data in the Annual Report						●	○	●	○	●	○
<b>3.11.2 MDOT Dry-Weather Outfall Inspections</b>											
A. Develop and implement an incident-based dry-weather screening process							○	●			
B. Create and conduct annual dry-weather screening and illicit discharge training for District Supervisors							○	●			
C. Develop and implement a system for tracking and reporting non-stormwater discharges							○	●			○
D. Address illicit discharges that encroach on MDOT rights-of-way as required in MDOT Rule #941-7501-09015							○	●			
E. Conduct follow-up inspections of non-stormwater discharges identified and reported							○	●			
F. Report the number of outfalls screened and the number of non-stormwater discharges reported in the Annual Report								●		●	
<b>3.11.3 Illicit Discharge Employee Training</b>											
A. Develop a new training program that focuses specifically on the dry-weather screening process								●	○		
B. Establish a training schedule								●			
C. Implement the training schedule as established								●			
D. Report on the number of training sessions conducted and the number of employees trained in the Annual Report								○		●	
<b>3.11.4 Illegal Dumping Detection and Reporting</b>											
A. Include illegal dumping in the dry-weather screening process and reporting and documentation procedures							○	●			
B. Implement procedures for removal of illegal dumps within the rights-of-way						●	○	●			
C. Implement a system to track occurrences of illegal dumping						○	○	●			○
D. Include illegal dumping identification and reporting in the training for illicit discharges as described in Section 3.11.3							○	●			
E. Report the number of illegal dumps identified and reported in the Annual Report								○		●	

 Continuing activity, reviewed or revised as needed throughout implementation

 One-time activity to develop or implement a measurable goal

● Individual or department to take lead in the development or implementation of an activity.

- Individual or department to provide strong support in the development or implementation of an activity.
- Individual or department to review and provide comments and guidance during the development or implementation of an activity.

**“Other” indicates participation and involvement by the Division of Transportation Information and IT divisions of MDOT  
Participation from Outreach Division with Mapping BMP is limited to the involvement of the Website Coordinator.**

### **3.12 CONSTRUCTION SITE RUNOFF**

The Construction Site Runoff Control Minimum Measure consists of BMPs that focus on the reduction of pollutants in stormwater runoff to the MS4 that originate from construction activities that involve land disturbance activities of greater than or equal to one acre. Primary pollutants of concern from construction activities include sediments generated from soil disturbance activities. BMPs selected for this minimum measure are proactive in nature and are designed to minimize occurrences of erosion and the transfer of sediments from construction areas to adjacent waterways, conveyances or outfalls.

### **3.13 CONSTRUCTION SITE RUNOFF RATIONALE STATEMENT**

Each BMP within the Construction Site Runoff Minimum Measure was selected using a process of 1) research of local, state, and federal BMP databases, 2) consideration of local practices with regard to applicability to existing water quality issues, 3) consideration of new practices with regard to economic impacts and impacts of integration into the regulated entity's operation systems, 4) consideration of the selected BMP's applicability to regulation and the general permit provisions, and 5) an analysis of the effectiveness of BMPs included within the first edition of the Five-Year Plan during the 2003-2007 permitting cycle.

### **3.14 CONSTRUCTION SITE RUNOFF SUMMARY**

The Construction Site Runoff Minimum Measure is organized to address the following:

1. To determine the mechanisms which will be used to require sediment and erosion controls on construction sites,
2. To establish enforcement procedures and actions to ensure compliance,
3. To establish requirements for construction site operators to implement appropriate and site-specific erosion and sediment control BMPs,
4. To establish requirements for construction site operators to control waste on construction sites such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste,
5. To establish procedures for site plan review that incorporate the consideration of potential water quality impacts,
6. To establish procedures for site inspection and enforcement of control measures, and
7. To establish procedures to provide appropriate education and training for construction site operators and MDOT personnel overseeing construction operations.

Evaluations of success of specific BMPs will be established through careful analysis of the measurable goals for each BMP included within the Construction Site Runoff Minimum Measure. Each BMP will have a specific measurable goal that is established by discernment of attainable goals for the various BMP implementation steps and the capacity of responsible divisions within the context of financial and human resources to effectively meet stated goals.

### **3.15 CONSTRUCTION SITE RUNOFF BEST MANAGEMENT PRACTICES**

#### **3.15.1 MDOT CONSTRUCTION PERSONNEL EDUCATION**

In order to communicate established policies and procedures with respect to construction operations, MDOT personnel overseeing construction operations and construction site operators must be trained on proper management procedures as well as procedures and protocols for reporting accidental discharges and inspection results. To ensure that construction related personnel and operators are properly trained, MDOT will:

- A. Review existing construction education and training programs to ensure relevance and to take advantage of new technologies and methods of managing stormwater runoff on construction sites. Education and training programs will be updated and modified as appropriate.
- B. Implement the training program for MDOT and contractor personnel. The first year training will include all District Offices. Subsequent year's trainings will provide refresher training and training of new employees and personnel.
- C. Report the number of training sessions held and the number of MDOT and contractor personnel trained in its annual report to MDEQ.

#### **3.15.2 CONSTRUCTION PLANS REVIEW**

MDOT desires to take a proactive approach to minimizing occurrences of erosion and sediment transfer on construction sites. To be effectively proactive, the construction process must begin with the development of construction plans indicating the proper selection of construction BMPs to ensure that each construction site is addressed in the context of site-specific conditions and that the Stormwater Pollution Prevention Plans (SWPPP) for construction sites are relevant and applicable to site conditions. To accomplish this goal, MDOT will:

- A. Communicate existing policies to construction activity participants that detail the requirements to develop and submit written project and/or site-specific sediment and erosion control plans, including a spill control plan if applicable.
- B. Fully implement internal tracking and plan review procedures to address the following issues: Conformance to final stormwater guidelines, appropriate use of temporary erosion controls, and inclusion of any required local, state or federal stormwater permit documents. The implementation of this process will require interdivisional communication and cooperation within MDOT to ensure that all divisions active in the construction process provide an appropriate level of review.
- C. Provide an opportunity for the SWMP Committee to periodically review plans and procedures to evaluate effectiveness.

- D. Maintain records of plans reviewed and approved for construction under this program.
- E. Report the number of plans reviewed, approved, and rejected (or remanded for revision) under the plans review program.

### **3.15.3 CONSTRUCTION INSPECTION PROCEDURES AND STANDARDS**

The majority of construction projects undertaken by MDOT are linear in nature and often require the incorporation of construction methods and stormwater BMPs that differ from those used on building construction projects. It is necessary that MDOT have a standard menu of BMPs that can be selected from in establishing a treatment-train approach to sediment and erosion control on transportation related construction sites. To establish these procedures and standards, MDOT will:

- A. Review, evaluate and revise the MDOT Construction Stormwater Guidelines to ensure consistency with the MDEQ “Field Manual for Erosion and Sediment Control on Construction Sites in Mississippi.”
- B. Establish a standard checklist for inspection procedures based on the final MDOT Construction Stormwater Guidelines that address the following categories: 1) the proper installation of erosion and sediment control BMPs, 2) control of construction related wastes to include sanitary wastes, 3) on-site documentation and records, 4) corrective actions and on-site communication, and 5) standard inspection methodologies to ensure consistency among all inspections.
- C. Use the standard checklist to create inspection forms to be used for all construction stormwater inspections to ensure compliance with MDOT Stormwater Guidelines.
- D. Incorporate enforcement language into MDOT construction contracts to ensure compliance with MDOT Construction Stormwater Guidelines and MDEQ construction permit provisions.
- E. Provide final construction inspection forms to the SWMP Committee to review.
- F. Develop the final version of the construction inspection forms and procedures based on SWMP Committee comments. Provide the final version of forms and procedures to contracting officers and construction personnel.

### **3.15.4 CONSTRUCTION SITE INSPECTIONS**

MDOT will use the forms and procedures established in Section 3.15.3 to develop standardized and consistent procedures for conducting regular construction site inspections. The purpose of the inspections is to ensure compliance with MDEQ and MDOT stormwater management requirements and to ensure that BMPs incorporated into construction projects continue to function as designed. In establishing site inspection methods, MDOT will:

- A. Review existing procedures for internal tracking of new and on-going construction activities and revise as necessary.
- B. Inspect construction sites using appropriate inspection procedures and forms to ensure compliance with MDOT Construction Stormwater Guidelines. Inspection schedules will be standardized based on inspection frequency requirements as outlined in the MDEQ construction permit.
- C. Require contractors to conduct regular and routine self-inspections on construction sites.
- D. Require contractors to perform corrective actions at MDOT construction sites when conditions are discovered through inspection processes that are not in compliance with MDOT Construction Stormwater Guidelines, construction contract language, and/or MDEQ permit provisions.
- E. Maintain records of inspections and corrective actions performed under the inspection program.
- F. Report the number of construction site inspections and corrective actions in its annual report to MDEQ.

### **3.15.5 CONSTRUCTION RELATED PUBLIC REPORTING**

The purpose of this BMP is to provide a mechanism for the general public to report stormwater and water quality concerns related to MDOT construction projects. Through this mechanism, MDOT desires to take advantage of an aware populace to provide opportunities to address stormwater and water quality concerns on construction sites before they become serious water quality issues. To create an environment that encourages public reporting and feedback on construction projects, MDOT will:

- A. Review existing mechanisms for public reporting of stormwater and water quality concerns at MDOT construction sites to include a quantification of the reports received from the public during the previous five years. Mechanisms will be modified if necessary to increase effectiveness.
- B. Ensure that the mechanisms in place address the following items:
  - a. Multiple contact methods for reporting observations that include at a minimum, a construction “hot-line” phone number and a webpage dedicated to providing contact information for reporting concerns.
  - b. Information required for a complete public report on a potential construction related stormwater quality problem.
- C. Review existing internal tracking systems used to accept and process information reported by the public. Systems will be modified as necessary.
- D. Conduct on-site investigations of those sites reported by the public that warrant investigation according to the best judgment of MDOT personnel.

- E. Maintain records on the number of public reports received and responded to.
- F. Report on the number of public reports received and responded to in its annual report to MDEQ.

**Table 3.15 Construction Site Runoff – Implementation Schedule and Responsibility**

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.15.1 MDOT Construction Personnel Education</b>											
A. Review existing training programs and modify if necessary	●					●					
B. Implement training for all construction personnel to include all District Offices in Year 1. Years 2-5 to be refresher training	●	●	●	●	●	●					
C. Report the number of training sessions held and the number of people trained in the Annual Report	●	●	●	●	●	●				●	
<b>3.15.2 Construction Plans Review</b>											
A. Provide communication to construction participants on the submittal requirements for written erosion control plans	●					●				●	
B. Implement internal tracking and plan review procedures	●	●	●	●	●	●	○			●	
C. Provide an opportunity for the SWMP Committee to periodically review plan review procedures	●					●				●	
D. Maintain records of plans reviewed and approved for construction	●	●	●	●	●	●				●	
E. Report the number of plans reviewed, approved or remanded for revision in the Annual Report	●	●	●	●	●	●				●	
<b>3.15.3 Construction Inspection Procedures and Standards</b>											
A. Review, evaluate and revise the MDOT Construction Stormwater Guidelines	●					●	○			●	
B. Establish a standard checklist for construction inspections	●					●	○			●	
C. Develop inspection forms to be used on all construction stormwater inspections	●					●	○			●	
D. Incorporate enforcement language into construction contract documents	●					●	○			●	
E. Provide final construction inspection forms to the SWMP Committee to review	●					●	○			●	
F. Develop final inspection forms and procedures and distribute to contracting officers and construction personnel	●					●	○			●	
<b>3.15.4 Construction Site Inspections</b>											
A. Review existing procedures for tracking of new and ongoing construction activities and revise as necessary	●					●				●	
B. Inspect construction sites using approved forms and procedures based on established inspection schedules	●	●	●	●	●	●					
C. Require contractors to conduct regular and routine self-inspections on construction sites	●	●	●	●	●	●					
D. Require contractors to perform corrective actions when conditions are discovered that are non-compliant	●	●	●	●	●	●					
E. Maintain records of inspections and corrective actions performed under the inspection program	●	●	●	●	●	●				●	
F. Report the number of construction site inspections and corrective actions in the Annual Report	●	●	●	●	●	●				●	

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.15.5 Construction Related Public Reporting</b>											
A. Review and revise existing mechanisms for public reporting of stormwater quality concerns at construction sites						●			●		
B. Ensure that mechanisms include multiple contact methods and detailed requirements for full and correct reporting						●			●		
C. Review existing internal tracking systems used to process public reports and revise if necessary						●			●		
D. Conduct on-site investigations of those sites reported by the public						●	●				
E. Maintain records of public reports of construction stormwater quality concerns						●					
F. Report the number of public reports received and responded to in the Annual Report						●			○	●	

 Continuing activity, reviewed or revised as needed throughout implementation

 One-time activity to develop or implement a measurable goal

- Individual or department to take lead in the development or implementation of an activity.
- Individual or department to provide strong support in the development or implementation of an activity.
- Individual or department to review and provide comments and guidance during the development or implementation of an activity.

### **3.16 POST-CONSTRUCTION SITE RUNOFF**

The Post-construction Stormwater Runoff Minimum Measure consists of BMPs that focus on the prevention or minimization of water quality impacts from new developments and redevelopments once construction activities are completed. Because MDOT construction projects involve the creation of impervious surfaces, it is important to ensure that the runoff originating from these surfaces does not create erosion or other stormwater quality concerns. BMPs incorporated into this minimum measure are designed to ensure that appropriate reviews are conducted and that pre-construction conditions relative to affected waterways or streams are taken into consideration during the design, construction and post-construction phases.

### **3.17 POST-CONSTRUCTION SITE RUNOFF RATIONALE STATEMENT**

Each BMP within the Post-Construction Site Runoff Minimum Measure was selected using a process of 1) research of local, state, and federal BMP databases, 2) consideration of local practices with regard to applicability to existing water quality issues, 3) consideration of new practices with regard to economic impacts and impacts of integration into the regulated entity's operation systems, 4) consideration of the selected BMP's applicability to regulation and the general permit provisions, and 5) an analysis of the effectiveness of BMPs included within the first edition of the Five-Year Plan during the 2003-2007 permitting cycle.

### **3.18 POST-CONSTRUCTION SITE RUNOFF SUMMARY**

The Post-Construction Site Runoff Minimum Measure is organized to identify the following:

1. Mechanisms that will be used to address post-construction runoff from new development and redevelopment projects,
2. Procedures to ensure that potentially affected sensitive and/or impaired water bodies including those with adopted TMDLs are taken into consideration during the design and implementation of post-construction BMPs,
3. Opportunities for interagency cooperation and communication is conducted in a manner that ensures a high probability of successful implementation of post-construction BMPs, and
4. Policies and procedures for long-term inspection and maintenance of post-construction BMPs.

Evaluations of success of specific BMPs will be established through careful analysis of the measurable goals for each BMP included within the Post-Construction Runoff Minimum Measure. Each BMP will have a specific measurable goal that is established by discernment of attainable goals for the various BMP implementation steps and the capacity of responsible divisions within the context of financial and human resources to effectively meet stated goals.

### **3.19 POST-CONSTRUCTION SITE RUNOFF BEST MANAGEMENT PRACTICES**

#### **3.19.1 PROTECTION OF SENSITIVE AND/OR IMPAIRED WATER BODIES**

To assist in the effective review of post-construction BMPs to be implemented on development and/or redevelopment projects, a review of the potential impacts to sensitive water bodies, impaired stream segments, and stream segments with approved TMDLs will be conducted during the plans review process for all development and redevelopment projects within the MS4. To ensure complete and accurate review and consideration of sensitive or impaired water bodies relative to development or redevelopment projects, MDOT will:

- A. During the project planning and design stage, conduct a review of the most current 303(d) listing of impaired streams, MDEQ's database of TMDLs and any published WIPs to determine potential post-construction impacts to water bodies with existing environmental concerns or existing regulatory mechanisms.
- B. As part of an EA and FONSI proposed project segments that have the potential to impact sensitive or impaired water bodies are identified. Identification of sensitive or impaired water bodies will be conducted through the review and internal distribution of approved TMDLs, the most current 303(d) report, and any existing Watershed Implementation Plans (WIPs) that exist within the MS4.
- C. Report activities conducted under this program focusing on the protection of impaired water bodies in its annual report to MDEQ.

#### **3.19.2 PARTICIPATION IN LOCAL WATERSHED PLANNING AND MODELING**

MDEQ has established a watershed planning and modeling program that utilizes a basin approach to water quality management. MDOT has sought out opportunities to participate in MDEQ's basin approach and is on record as a stakeholder in the basin approach process. Through this process, both agencies have opportunities to share information critical to efforts to restore water quality throughout the state and to ensure that new projects are designed and implemented in a manner that protects water quality within the MS4. To continue this effort of interagency cooperation, MDOT will:

- A. Continue to participate as an active stakeholder in the MDEQ basin management approach process by participating in planning meetings, and by continuing to communicate water quality management efforts within the basin management process.
- B. Ensure that existing water quality status databases including the 303(d) list and existing or draft TMDLs are reviewed and considered during the project design and planning process.

**Table 3.19 Post-Construction Site Runoff – Implementation Schedule and Responsibility**

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.19.1 Protection of Sensitive and/or Impaired Water Bodies</b>											
A. Conduct a review of the most current 303(d) list, approved TMDLs, and WIPs as they are published to determine potential impacts from projects							●			◐	
B. As part of an EA and FONSI proposed project segments that have the potential to impact sensitive or impaired water bodies are identified. EA and FONSI processes will also consider current 303(d) lists and approved TMDLs as applicable							●			◐	
C. Report activities conducted under this program in the Annual Report						◐	◐			●	
<b>3.19.2 Participation in Local Watershed Planning and Modeling</b>											
A. Continue to participate in the MDEQ Basin Management Approach Process							●			◐	
B. Review existing 303(d) lists and draft and/or adopted TMDLs during the project planning/design process							●			◐	



Continuing activity, reviewed or revised as needed throughout implementation  
 One-time activity to develop or implement a measurable goal

- Individual or department to take lead in the development or implementation of an activity.
- ◐ Individual or department to provide strong support in the development or implementation of an activity.
- ◑ Individual or department to review and provide comments and guidance during the development or implementation of an activity.

**“Other” indicates participation from IT and Mapping Divisions.**

### **3.20 POLLUTION PREVENTION / GOOD HOUSEKEEPING**

The Pollution Prevention / Good Housekeeping Minimum Measure consists of BMPs that focus on the reduction of pollutants in stormwater runoff that originate from MDOT operations and maintenance activities. The operations and maintenance activities include transportation system maintenance, vehicle and equipment maintenance, and materials handling and storage. BMPs selected for this minimum measure are intended to be proactive in nature and focus primarily on prevention of circumstances that have the potential to contribute to polluted runoff.

### **3.21 POLLUTION PREVENTION / GOOD HOUSEKEEPING RATIONALE STATEMENT**

Each BMP within the Pollution Prevention / Good Housekeeping Minimum Measure was selected using a process of 1) research of local, state, and federal BMP databases, 2) consideration of local practices with regard to applicability to existing water quality issues, 3) consideration of new practices with regard to economic impacts and impacts of integration into the regulated entity's operation systems, 4) consideration of the selected BMP's applicability to regulation and the general permit provisions, and 5) an analysis of the effectiveness of BMPs included within the first edition of the Five-Year Plan during the 2003-2007 permitting cycle.

### **3.22 POLLUTION PREVENTION / GOOD HOUSEKEEPING SUMMARY**

The Pollution Prevention / Good Housekeeping Minimum Measure is organized to identify the following:

1. Procedures and schedules for transportation system maintenance to include general maintenance activities, street sweeping, litter and debris collection on roadways, and herbicide application,
2. Procedures for vehicle and equipment maintenance,
3. Procedures for storage and handling of materials at MDOT maintenance facilities to include hazardous materials management and spill prevention planning, and
4. Opportunities for employee training on proper good housekeeping and pollution prevention procedures.

Evaluations of success of specific BMPs will be established through careful analysis of the measurable goals for each BMP included within the Pollution Prevention / Good Housekeeping Minimum Measure. Each BMP will have a specific measurable goal that is established by discernment of attainable goals for the various BMP implementation steps and the capacity of responsible divisions within the context of financial and human resources to effectively meet stated goals.

### **3.23 POLLUTION PREVENTION / GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES**

#### **3.23.1 MAINTENANCE OF ROADWAYS**

Routine maintenance activities on MDOT's roadway system has the potential to contribute to polluted runoff. Examples of pollutants of concern include metals, asphalt and asphalt related materials, chemicals, and sediments collected on roadways and shoulders. To minimize the potential impacts from roadway maintenance, MDOT will:

- A. Evaluate existing roadway maintenance activities to determine if modifications to current practices would benefit stormwater quality.
- B. Research and identify alternative practices or the use of alternative materials that would reduce the discharge of road materials during construction or maintenance activities.
- C. Revise roadway maintenance specifications and standard operating procedures according to identified alternative practices.
- D. Maintain records of road maintenance activities and the use of alternative maintenance practices.
- E. Report on roadway maintenance activities and the use of alternative maintenance practices in its annual report to MDEQ.

#### **3.23.2 STREET SWEEPING**

Street sweeping is an effective method of reducing the amount of sediment and associated pollutants discharged from roadways. Currently, MDOT conducts street sweeping activities on an as-needed basis with some of the work being done on a contractual basis. To ensure that street sweeping activities are conducted in an efficient and effective manner, MDOT will:

- A. Identify roadway segments that are to be swept to remove sediments and other pollution. Roadways to be swept are typically those with curb and gutter design.
- B. Establish schedules and implement regular street sweeping of identified roadways.
- C. Determine average man-hours per roadway section and determine if adjustments in scheduling would provide optimized pollutant removal.
- D. Maintain records of roadway sections and the associated man-hours utilized in sweeping those sections.
- E. Adjust sweeping schedules according to program assessment on an annual basis.

- F. Report the roadway sections swept and man-hours utilized to sweep those sections.

### **3.23.3 LITTER AND DEBRIS COLLECTION**

MDOT has an active litter and debris collection program that utilizes local government partners and participants in the Adopt-A-Highway and Adopt-an-Interchange programs. Through these efforts, MDOT removes significant volumes of litter and debris from the transportation system within the MS4. To ensure continued success of these program and to continue to reduce the discharge of floatable materials to receiving streams, MDOT will:

- A. Evaluate the existing inventory of litter collection areas and programs active in the MS4 to identify program gaps that may exist in the MS4.
- B. Collect litter according to the established schedule.
- C. Provide agency support to participating partners in clean-up and litter removal programs.
- D. Evaluate and adjust collection schedules annually to optimize program effectiveness.
- E. Continue to utilize the County inmate litter collection program to maximize the impact of litter removal within MS4 Counties.
- F. Maintain records of the quantity of litter collected for each defined area, e.g. cubic yards or tons.
- G. Report the quantity of litter collected from MDOT collection areas in its annual report to MDEQ.

### **3.23.4 HERBICIDE APPLICATION**

The use of herbicides can be an effective tool in keeping unwanted vegetation from growing along roadways and medians. However, improper use can have potentially harmful effects on stormwater runoff and water quality. To ensure that the application of herbicides does not contribute to impaired runoff and water quality, MDOT will:

- A. Review and update as necessary the existing inventory of areas designated for herbicide application in urbanized areas to include the following information: areas of application, type of herbicide applied, and the purpose of the application (e.g. type of vegetation to be controlled).
- B. Ensure compliance with local, state, and federal regulations associated with herbicide application, e.g. licensing regulations and requirements.
- C. Review and update as necessary the existing herbicide application schedule.

- D. Assess each location for opportunities to implement alternative practices for non-herbicide methods of maintenance.
- E. Develop a prioritized list of areas where alternative weed and vegetation control practices would reduce overall herbicide application volumes.
- F. Report the total volume of herbicide applied in its annual report to MDEQ.

### **3.23.5 VEHICLE MAINTENANCE**

MDOT owns and operates a variety of vehicles and equipment used in administration, development and maintenance operations. These vehicles range from passenger vehicles to heavy equipment, all of which requires regular and routine maintenance. Improperly maintained vehicles and equipment have the potential to contribute to water quality impairment through leaking automotive fluids and other vehicle and equipment related issues. To ensure that MDOT's vehicles and equipment do not contribute to impaired water quality, MDOT will:

- A. Review and update the existing inventory of MDOT owned vehicles and equipment.
- B. Require MDOT vehicle and equipment operators to conduct daily inspections of vehicles to check for fluid leaks and other maintenance issues.
- C. Conduct routine maintenance on all vehicles and equipment according to MDOT standard operating procedure.
- D. During routine maintenance of MDOT owned vehicles and equipment, inspect vehicles for the presence of fluid leaks.
- E. Schedule repairs for vehicles determined to have fluid leaks.
- F. Maintain vehicle maintenance records and document fluid leak repair activities.
- G. Review vehicle and equipment inspection and maintenance records on an annual basis to evaluate conformance to vehicle manufacturer service specifications.
- H. Report the results of the equipment superintendent's checklist for vehicles repaired in its annual report to MDEQ.

### **3.23.6 IMPLEMENT A PROGRAM FOR IDENTIFICATION, DISPOSAL AND RECYCLING OF POTENTIALLY HAZARDOUS MATERIALS**

Through the course of implementing project development and maintenance operations, MDOT uses a variety of materials such as tar, oils, asphalt, and other petroleum-based products that have a high potential for undesirable impacts to water quality. Many of these materials are stored in containers that require special disposal methods outside of standard waste disposal methods. In addition, materials that may go unused and become dated or obsolete must be disposed of in a proper manner. To ensure that the use and disposal of potentially hazardous materials is properly managed, MDOT will:

- A. Conduct environmental audits at each maintenance facility to determine the types and quantities of materials are being used. Each environmental audit will conclude with a summary report that provides audit findings and suggestions for potential remedial actions.
- B. Review standard operating procedures related to the proper disposal of hazardous materials determined from the environmental audits. Revise standard operating procedures as necessary.
- C. The environmental audits will be used to create a Stormwater Pollution Prevention Plan (SWPPP) for each maintenance facility that will serve as a guide for remediation of non-compliant situations and for maintenance of compliance over time.
- D. Develop training materials related to MDOT's maintenance operations for the proper disposal of these materials.
- E. Research and implement alternative methods of disposal of hazardous materials including recycling and reuse.
- F. Report the findings of the environmental audits and remedial actions undertaken in its annual report to MDEQ.

### **3.23.7 SPILL PREVENTION PLANS**

MDOT complies with federal Spill Prevention Control and Counter Measures (SPCC) designed to ensure that spill response procedures consider stormwater quality protection measures. To ensure continued success of this program, MDOT will:

- A. Evaluate each MDOT owned facility and determine if Spill Prevention Control and Countermeasure Plans are required.
- B. Develop, review and maintain SPCC plans for MDOT owned facilities that require plans.
- C. Comply with SPCC plan requirements at qualifying MDOT owned facilities to include consideration of the following:
  - a. Employee training,
  - b. Maintenance of spill prevention equipment,
  - c. Maintenance of SPCC records, and
  - d. Monitor, update and recertify the SPCC plan according to SPCC regulations.
- D. Ensure that all qualifying MDOT owned facilities are equipped with appropriate spill cleanup kits.
- E. Report the number of facilities with SPCC plans and the current status of each SPCC plan.

### **3.23.8 EMPLOYEE TRAINING**

MDOT recognizes the importance of conducting an employee training that focuses on right-of-way maintenance, fleet and building maintenance, and SPCC compliance as they relate to maintenance and protection of water quality. To ensure continued success of training programs, MDOT will:

- A. Review existing training materials and modify as necessary. Training materials will focus on the following:
  - a. Right-of-way maintenance to include herbicide application,
  - b. Fleet and building maintenance,
  - c. Handling, storage, and disposal of hazardous materials, and
  - d. Procedures to ensure SPCC compliance.
- B. Identify personnel required to attend training.
- C. Develop a schedule for conducting employee training programs. First-year training will include all District Offices. Subsequent years will provide refresher training and training for new employees and personnel.
- D. Conduct employee training according to the identified schedule.
- E. Maintain records of training programs conducted and employee's attendance.
- F. Report the number of training programs conducted and employee attendance in its annual report to MDEQ.

**Table 3.23 Pollution Prevention / Good Housekeeping – Implementation Schedule and Responsibility**

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
<b>3.23.1 Maintenance of Roadways</b>											
A. Evaluate existing maintenance activities to determine if modifications to current practices would benefit water quality	●							●			
B. Research and identify alternative practices that would reduce discharge of materials during maintenance activities	●						●	●			
C. Revise maintenance specifications and standard operating procedures based on identified alternative practices	●							●			
D. Maintain records of roadway maintenance activities and the use of alternative maintenance practices	●	●	●	●	●			●			
E. Report roadway maintenance activities and alternate practices used in the Annual Report	●	●	●	●	●			●		●	
<b>3.23.2 Street Sweeping</b>											
A. Identify segments with curb and gutter construction to be swept to remove sediments and other pollutants	●							●			
B. Establish schedules and implement regular sweeping of identified roadways	●							●			
C. Determine average man-hours used in sweeping operations to determine if schedule adjustments would provide optimized pollutant removal	●	●	●	●	●			●			
D. Maintain records of roadway sections swept and associated man-hours used in sweeping those roadways	●	●	●	●	●			●			
E. Adjust sweeping schedules according to program assessment on an annual basis	●	●	●	●	●			●			
F. Report the roadway sections swept and man-hours utilized in the Annual Report	●	●	●	●	●			●		●	
<b>3.23.3 Litter and Debris Collection</b>											
A. Evaluate the existing inventory of collection areas to identify gaps in collection efforts	●							●	●		
B. Collect litter according to established schedules	●	●	●	●	●			●	●		●
C. Provide agency support to participating partners in clean-up and litter removal programs	●	●	●	●	●			●	●		●
D. Evaluate and adjust collection schedules annually to optimize program effectiveness	●	●	●	●	●			●	●		
E. Continue to utilize the County inmate litter collection program to maximize the impact of litter removal within MS4 Counties	●	●	●	●	●						
F. Maintain records of the quantity of litter collected for each defined area (in cubic yards or tons)	●	●	●	●	●			●	●		
G. Report the quantity of litter collected from MDOT collection areas in the Annual Report	●	●	●	●	●			●	●	●	
<b>3.23.4 Herbicide Application</b>											
A. Review and update as necessary the existing inventory of areas designated for herbicide application	●							●			

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
B. Ensure compliance with local, state, and federal regulations associated with herbicide application (e.g. licensing)								●			
C. Review and update as necessary the existing herbicide application schedule								●			
D. Assess each location for opportunities to implement alternative practices for non-herbicide methods of maintenance								●			
E. Develop a prioritized list of areas where alternative weed control practices would reduce volumes of herbicides used								●			
F. Report the total volume of herbicide applied in the Annual Report								●		●	
<b>3.23.5 Vehicle Maintenance</b>											
A. Review and update the existing inventory of MDOT owned vehicles and equipment								●			
B. Require vehicle operators to conduct daily inspections of vehicles to check for leaks and other maintenance issues								●			
C. Conduct routine maintenance on all vehicles and equipment per standard operating procedures								●			
D. During routine maintenance, inspect vehicles and equipment for fluid leaks								●			
E. Schedule repairs for vehicles determined to have fluid leaks								●			
F. Maintain vehicle maintenance records and document fluid leak repair activities								●			
G. Review vehicle and equipment maintenance records to ensure compliance with manufacturer service specifications								●			
H. Report the results of the equipment superintendent's checklist for vehicles repaired in the Annual Report								●		●	
<b>3.23.6 Implement a Program for Disposal and Recycling of Potentially Hazardous Materials</b>											
A. Conduct environmental audits at each maintenance facility to determine the types and quantities of materials used								●			
B. Review standard operating procedures related to disposal of hazardous materials, revise as necessary								●			
C. Develop facility-specific SWPPPs based on the completed environmental audits								●			
D. Develop training materials related to MDOT's maintenance operations for the proper disposal of hazardous materials								●			
E. Research and implement alternative methods of disposal of hazardous materials including recycling or reuse								●			
F. Report the findings of the environmental audits and remedial actions undertaken in the Annual Report								●		●	
<b>3.23.7 Spill Prevention Plans</b>											
A. Evaluate each MDOT owned facility to determine if Spill Prevention Control and Countermeasure Plans are required								●			
B. Develop, review and maintain SPCC plans for MDOT owned facilities that require plans								●			
C. Comply with SPCC plan requirements at qualifying MDOT owned facilities								●			

Control Measures and Measurable Goals	Implementation Schedule					Responsibility					
	Year 1	Year 2	Year 3	Year 4	Year 5	Construction	Environmental	Maintenance	Outreach	Roadway Design	Other
D. Ensure that all qualifying MDOT owned facilities are equipped with appropriate spill cleanup equipment								●			
E. Report the number of facilities with SPCC plans and the current status of each plan in the Annual Report								○		●	
<b>3.23.8 Employee Training</b>											
A. Review existing training materials and modify as necessary	■							●	○		
B. Identify personnel required to attend training	■							●	○		
C. Develop a schedule for training	■							●	○		
D. Conduct employee training according to the identified schedule								●	○		
E. Maintain records of training programs conducted and employee's attendance								○		●	
F. Report the number of training programs conducted and employee attendance in the Annual Report											

■ Continuing activity, reviewed or revised as needed throughout implementation  
 ■ One-time activity to develop or implement a measurable goal

- Individual or department to take lead in the development or implementation of an activity.
- Individual or department to provide strong support in the development or implementation of an activity.
- Individual or department to review and provide comments and guidance during the development or implementation of an activity.

**“Other” indicates participation from District Anti-Litter Coordinators.**

## Appendix 1.0 Glossary of Terms

**Best Management Practices “BMPs”** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of State. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Illicit Connection** means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

**Illicit Discharge** means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and those non-stormwater discharges identified in Part I.B.3. of the State General Permit permit.

**Major Receiving Water(s)** are those waters of the State that are named on a United States Geological Survey 7.5 Min. Quadrangle Map.

**Maximum Extent Practicable “MEP”** is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. The Clean Water Act requires that NPDES permits for discharges from MS4s “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods.” Compliance with the conditions of the general permit and the series of steps associated with identification and implementation of the minimum control measures will satisfy the MEP standard.

**Measurable Goals** are a municipality’s stormwater program goals, which are intended to gauge permit compliance and program effectiveness.

**Municipality** refers to a city, town, county, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes.

**MS4** is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a Large, Medium (e.g. "the Jackson MS4"), or Small Municipal Separate Storm Sewer System. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Jackson MS4 includes MS4s operated by the City of Jackson, the Mississippi Department of Transportation (MDOT) - state and interstate highways, their right-of-ways and thoroughfares [including highways, streets, roads, bridges, maintenance facilities, service areas, and rest areas] within the jurisdictional boundary of MDOT, the University Medical Center and others).

**Municipal Separate Storm Sewer** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or

pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW).

**National Pollutant Discharge Elimination System “NPDES”** refers to Section 402 of the federal Clean Water Act.

**NOI** is an acronym for (Notice of Intent) to be covered by this permit and is the mechanism used to “register” for coverage under a general permit.

**Outfall** refers to the location at which a drainage conveyance, which may be a pipe, box or open ditch, discharges, or flows into, a “Major Receiving Water” within the boundary of any MDOT right-of-way.

**Phase II** is the second stage of the State and Federal stormwater permit regulations.

**Regulated Entity** is a small MS4 within the State of Mississippi and located fully or partially within an urbanized area as determined by the latest Decennial Census pursuant to 40 CFR '122.32, or designated by MDEQ pursuant to 40 CFR 123.35.

**Small Municipal Separate Storm Sewer System** refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States, but is not defined as “large” or “medium” municipal separate storm sewer system (those municipalities with a population of 100,000 or more) . This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

**Stormwater** means rainfall runoff, snowmelt runoff, and surface runoff.

**Stormwater Management Program “SWMP”** refers to a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system.

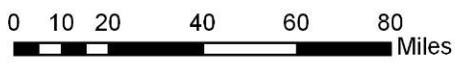
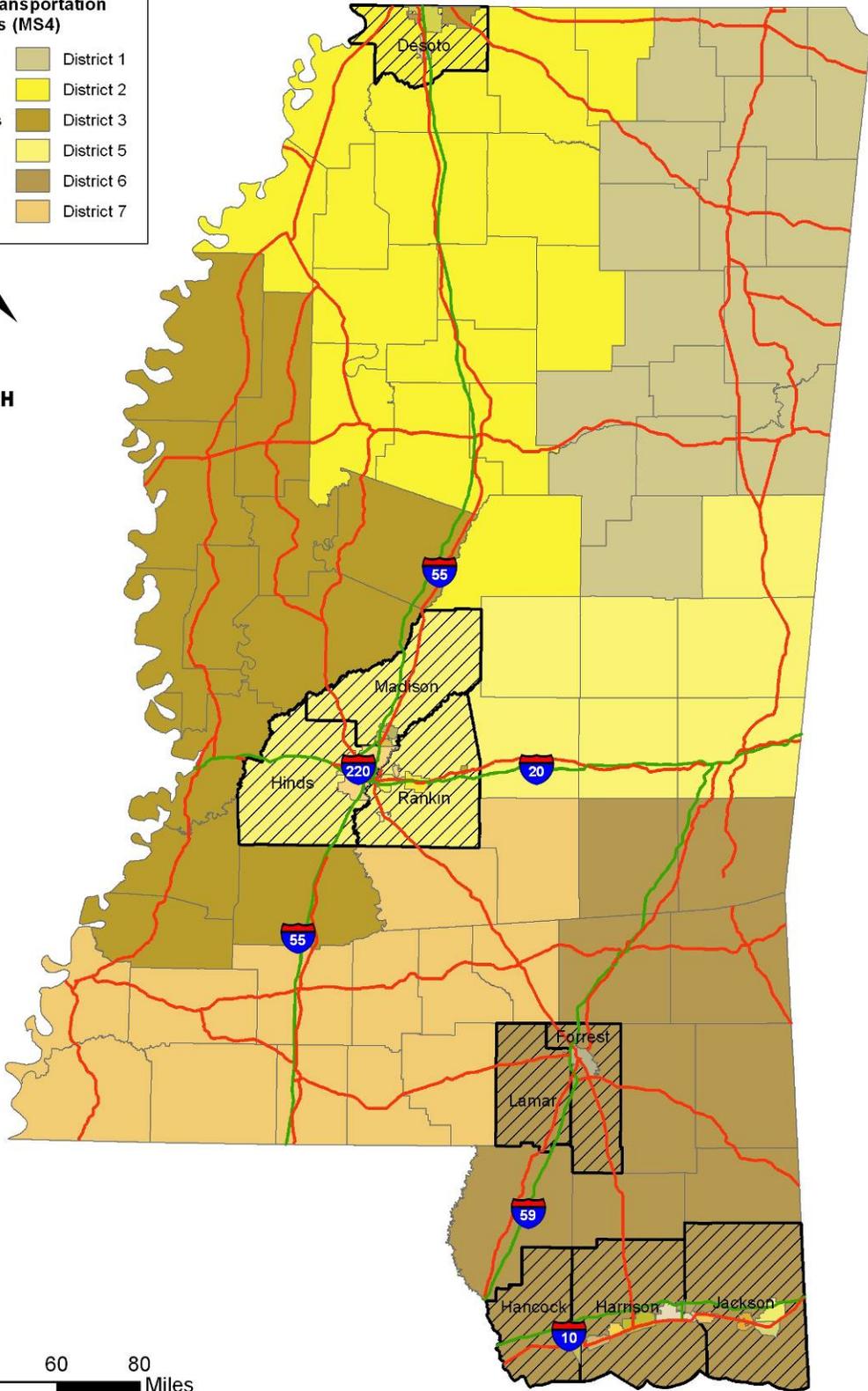
**Total Maximum Daily Load "TMDL"** means the calculated maximum permissible pollutant loading to a water body at which water quality standards can be maintained. The sum of waste load allocations (WLAs) and load allocations (LAs) for any given pollutant.

**Urbanized Area “UA”** is a land area comprising one or more places {core and fringe} with urban limits defined by a population density of 1,000 people per square mile and its contiguous census tracts of 500 people per square mile — that together have a residential population of at least 50,000.

## Appendix 2.0 MS4 Maps

State of Mississippi  
 Department of Transportation  
 Urban Areas (MS4)

-  Interstate
-  US Route
-  Urban Counties
-  District 1
-  District 2
-  District 3
-  District 5
-  District 6
-  District 7



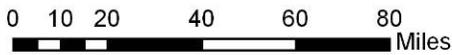
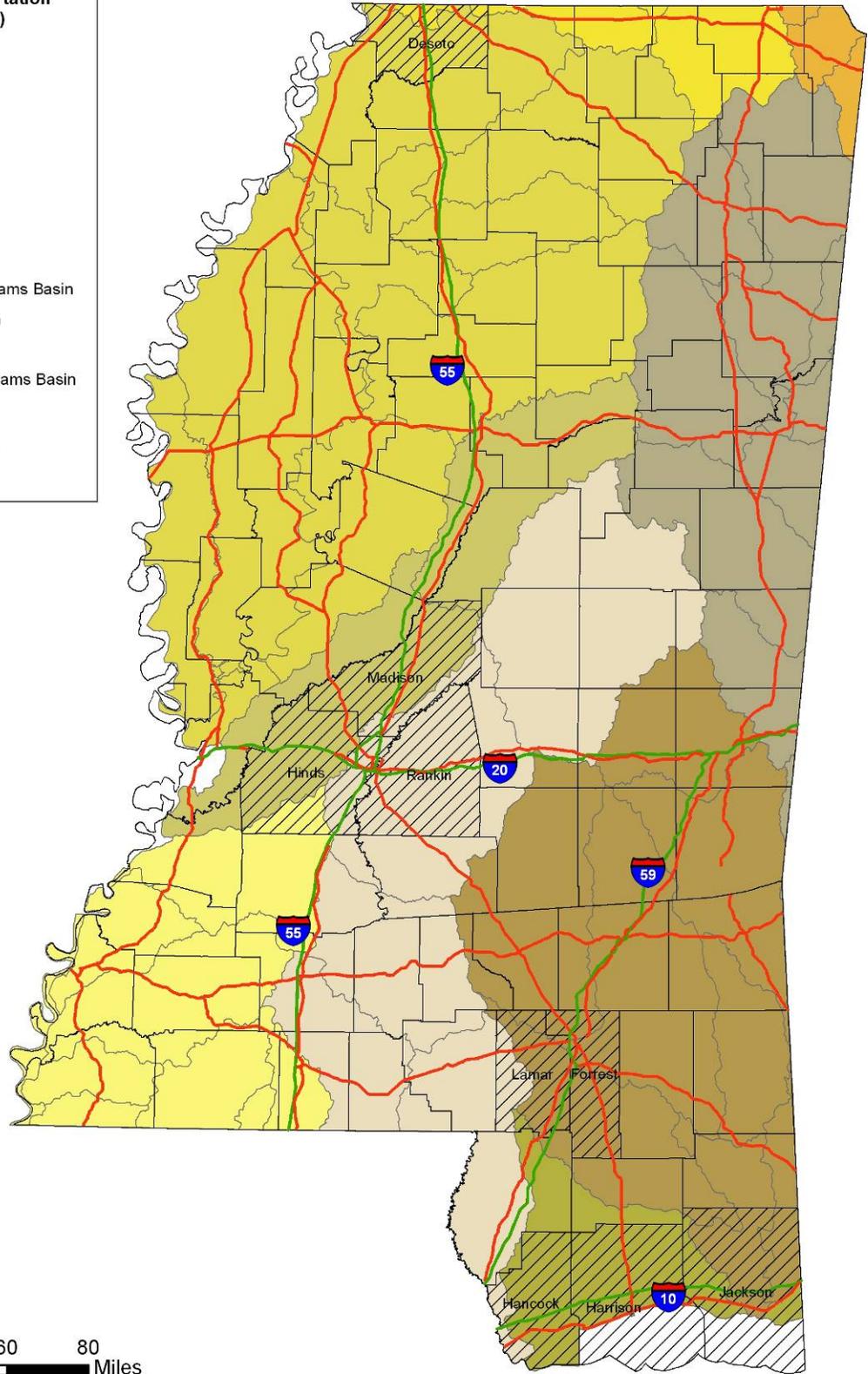
**State of Mississippi  
Department of Transportation  
Urban Areas (MS4)**

-  Interstate
-  US Route
-  MDOT Districts
-  Urban Counties

**Basins**

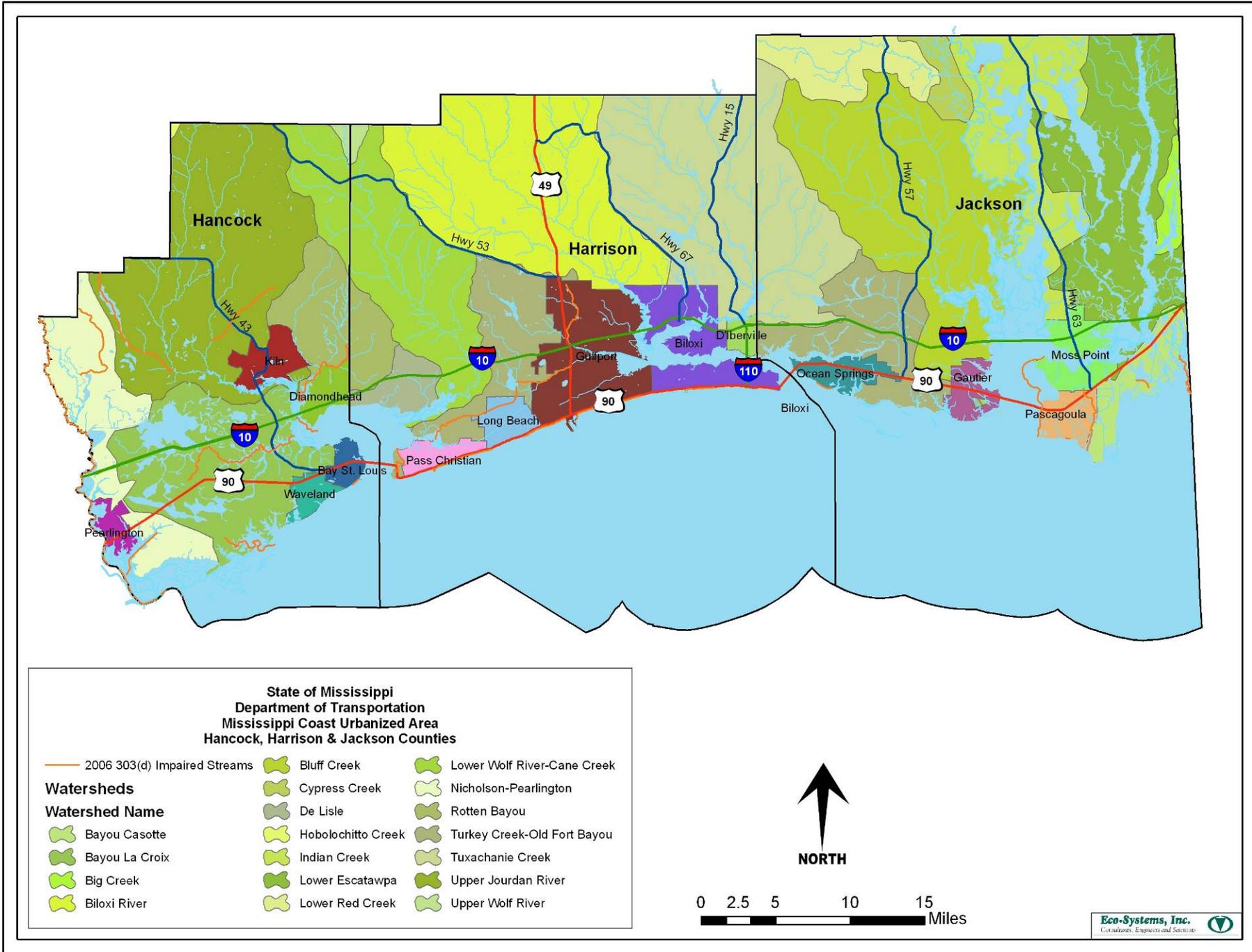
**Basin Name**

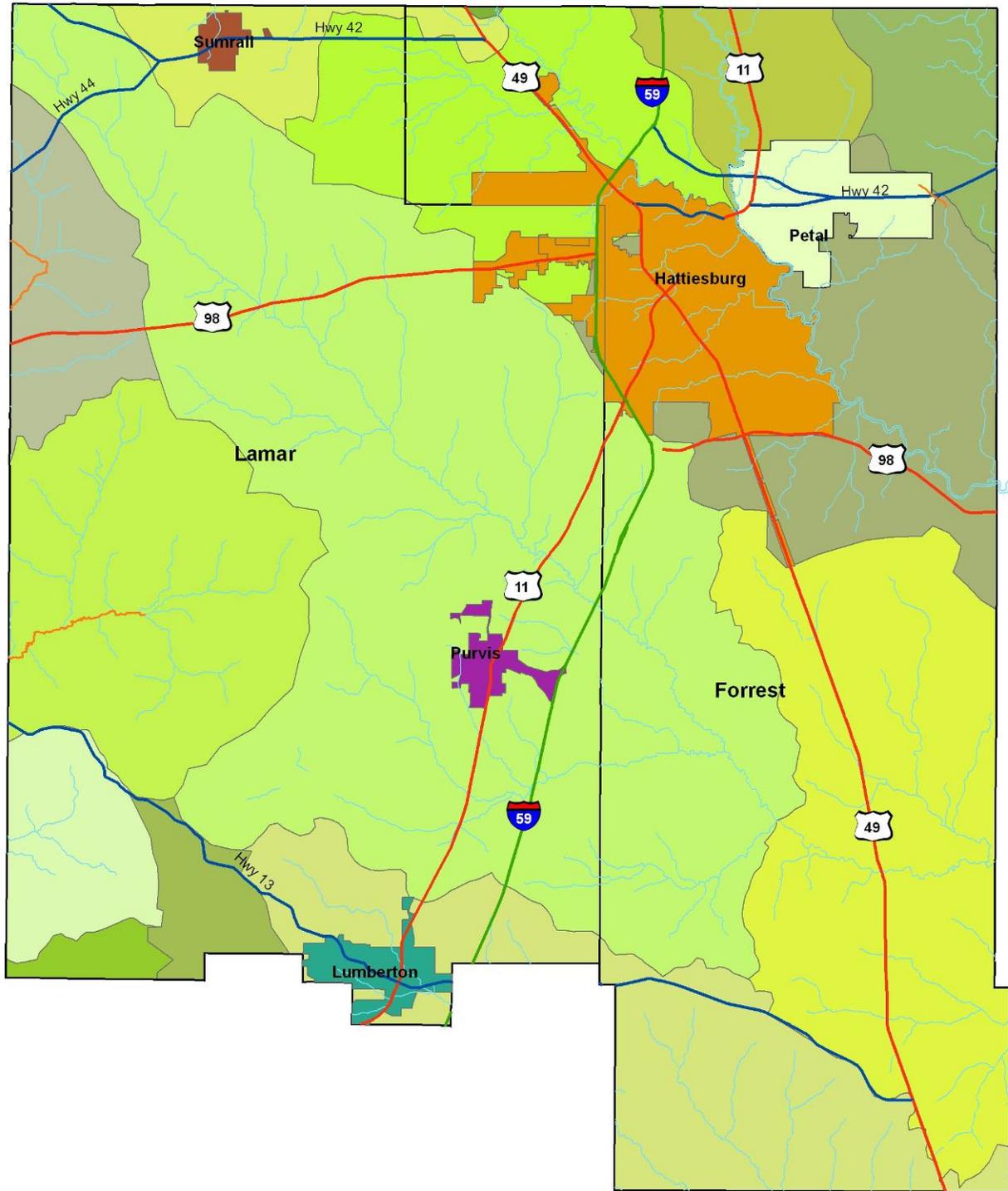
-  Big Black River Basin
-  Coastal Streams Basin
-  North Independent Streams Basin
-  Pascagoula River Basin
-  Pearl River Basin
-  South Independent Streams Basin
-  Tennessee River Basin
-  Tombigbee River Basin
-  Yazoo River Basin



**Eco-Systems, Inc.**  
Consultants, Engineers and Scientists

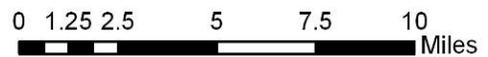






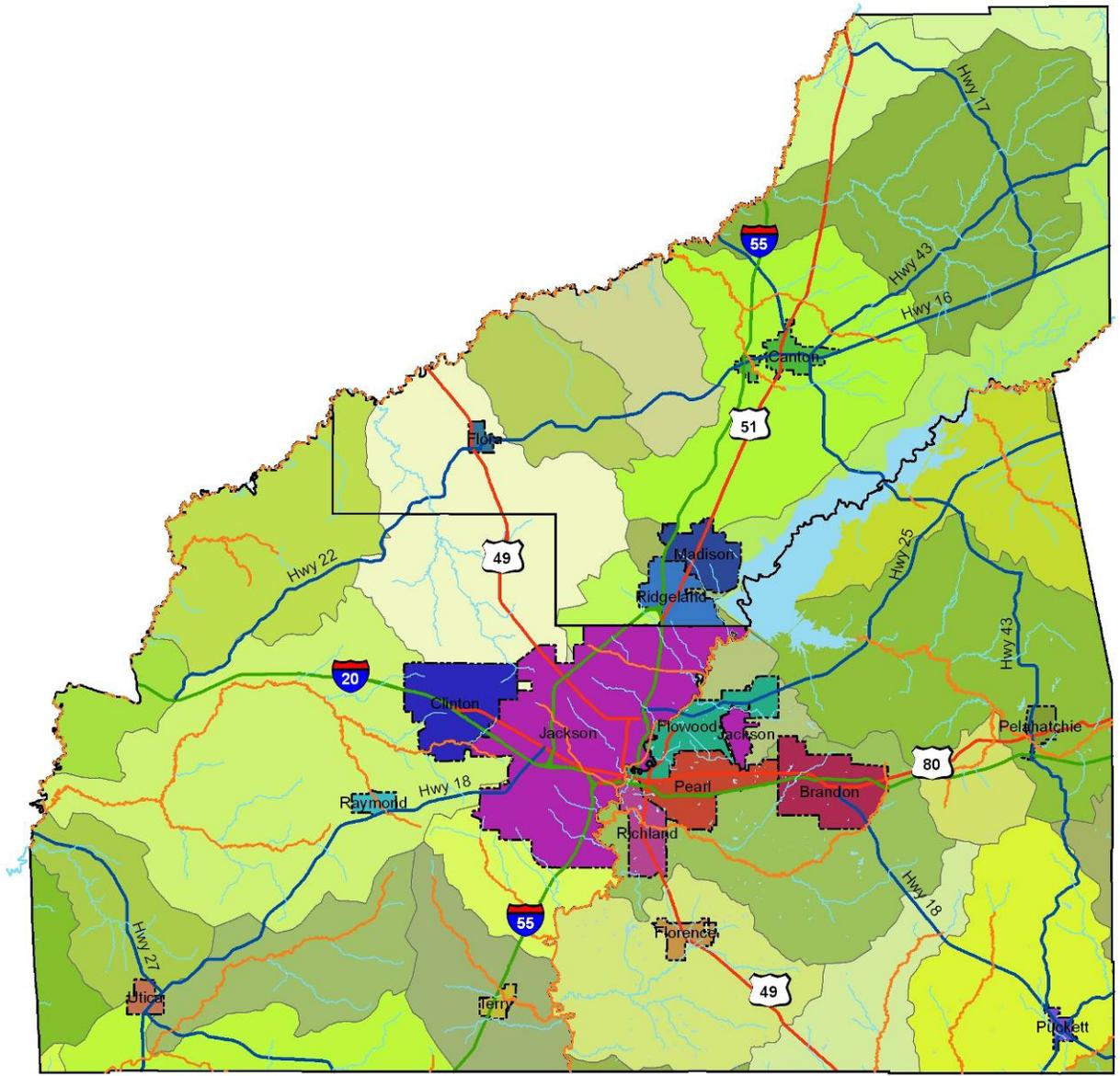
State of Mississippi  
 Department of Transportation  
 Forrest - Lamar Urbanized Area

- |                                |                       |                         |
|--------------------------------|-----------------------|-------------------------|
| — 2006 303(d) Impaired Streams | Lower Bowie River     | Okatoma Creek           |
| <b>Watersheds</b>              | Lower Leaf River      | Upper Black Creek       |
| <b>Watershed Name</b>          | Lower Little Creek    | Upper Red Creek         |
| Beaver Dam-Poplar Creeks       | Lower Tallahala Creek | Upper Wolf River        |
| Clear Creek                    | McCallum              | West Hobolochitto Creek |
| Little Creek                   | Middle Bowie Creek    |                         |



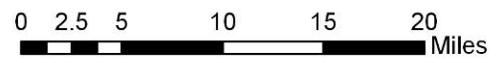
**Eco-Systems, Inc.**  
 Consultants, Engineers and Scientists

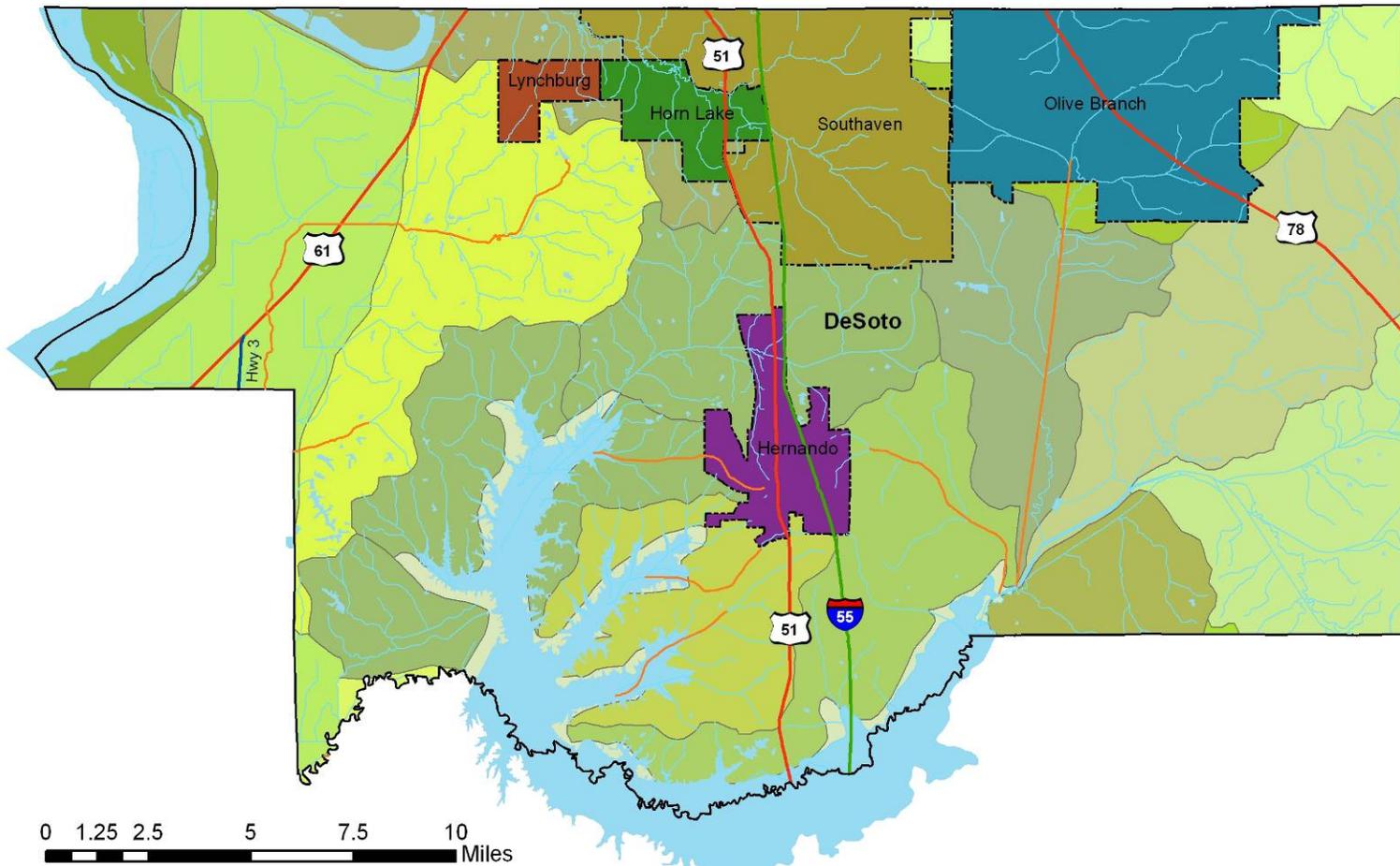




State of Mississippi  
 Department of Transportation  
 Jackson Metro Urbanized Area  
 Hinds, Madison & Rankin Counties

- |                               |                           |                      |                    |
|-------------------------------|---------------------------|----------------------|--------------------|
| 2006 303(i) Impaired Streams  | Caney Creek               | Five Mile Creek      | Porter-Cox Creeks  |
| <b>Watersheds</b>             | Clear Creek               | Fourteen Mile Creek  | Purple Creek       |
| <b>WSNAME</b>                 | Coffee Bogue Creek        | Hanging Moss Creek   | Rhodes Creek       |
| Bear-Beaver Creeks            | Dancing Rabbit Creek      | Jackson              | Rials Creek        |
| Bear-Tilda Bogue              | Doaks Creek               | Limestone Creek      | Richland Creek     |
| Bentonia                      | Dobbs Creek               | Love's Creek         | Seneatcha Creek    |
| Big Creek                     | Edwards                   | Lower Bayou Pierre   | Steen Creek        |
| Big Cypress                   | Ellison Creek             | Neely Creek          | Tallahalla Creek   |
| Big Sand Creek                | Eutawtaches Creek         | Panther Creek        | White Oak Creek    |
| Bogue Chitto-Lime Kiln Creeks | Fannegusha Creek          | Pelahatchie Creek    | Yockanookany River |
| Campbell Creek                | Five Creeks; Yazoo County | Persimmon-Burnt Corn |                    |



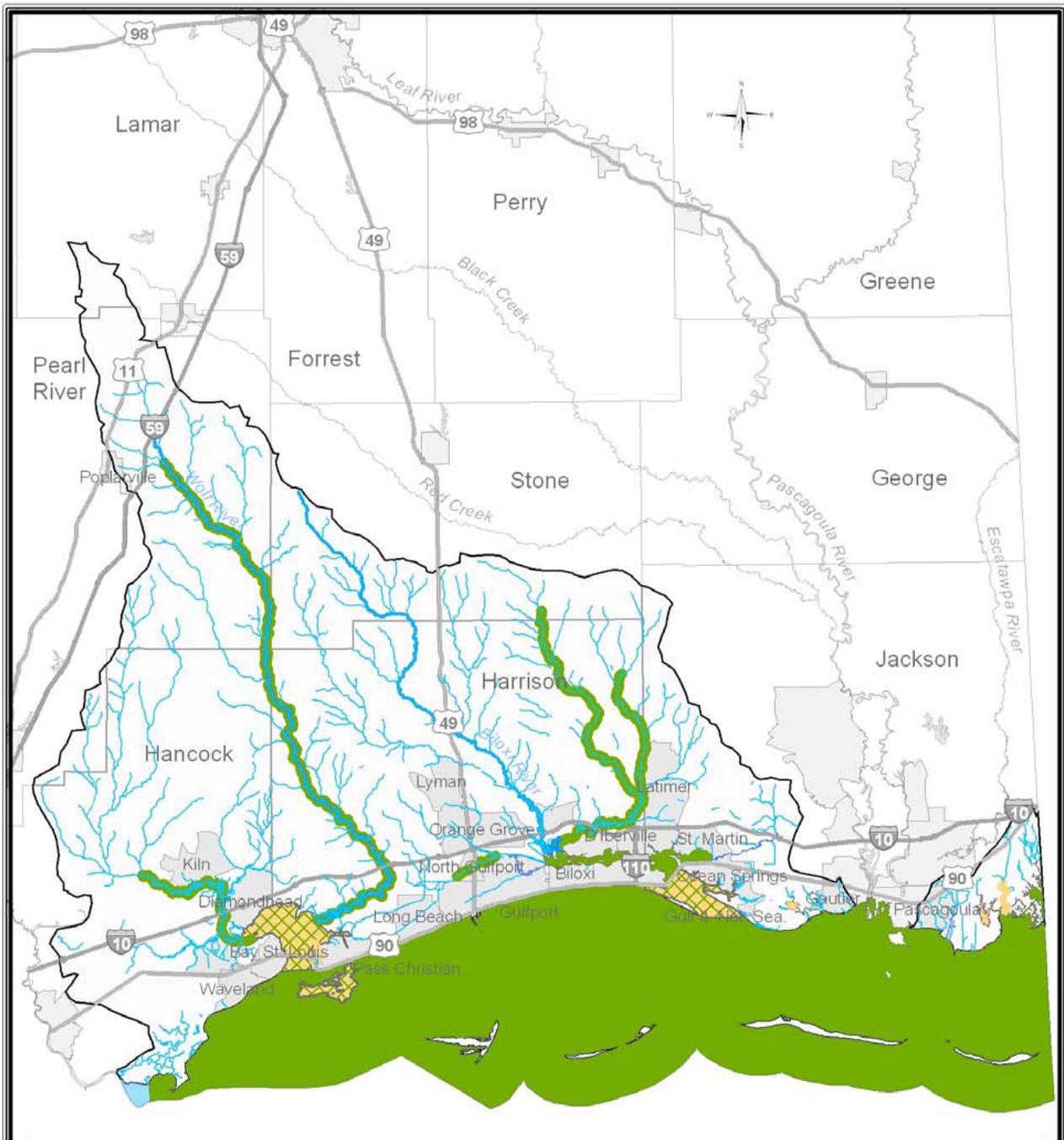


State of Mississippi  
 Department of Transportation  
 Memphis, Tennessee Urbanized Area  
 DeSoto County

- |                              |                                   |                    |
|------------------------------|-----------------------------------|--------------------|
| 2006 303(d) Impaired Streams | Flood Pool Arkabutla Lake         | Nonconannah Creek  |
| <b>Watersheds</b>            | Horn Lake Creek                   | Pigeon Roost Creek |
| <b>Watershed Name</b>        | Hurricane Creek; portion of       | Rock Creek         |
| Beartail Creek               | Johnson-Jackson-Whites Creeks     | Short Fork Creek   |
| Big And Little Jordan        | Lake Cormorant Bayou              | Upper Camp Creek   |
| Cane-Mussacuna Creeks        | Lower Camp Creek                  |                    |
| Coldwater River              | Mississippi River above Horn Lake |                    |



## Appendix 3.0 MS4 Impaired Streams and Designated Use Maps



## Coastal Streams Basin Water Quality Standards

Scale: 1:700,000

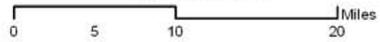
This map produced by the Department of Environmental Quality (MDEQ), Office of Pollution Control, Surface Water Division, Standards Modeling & TMDLs Branch on October 30, 2006.

This map is contained in the State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters, Adopted 2005.  
Projection: Mississippi Transverse Mercator

The Mississippi Department of Environmental Quality makes no warranties, expressed or implied, as to the accuracy, completeness, currentness, reliability, or suitability for any particular purpose, of the data contained on this map.



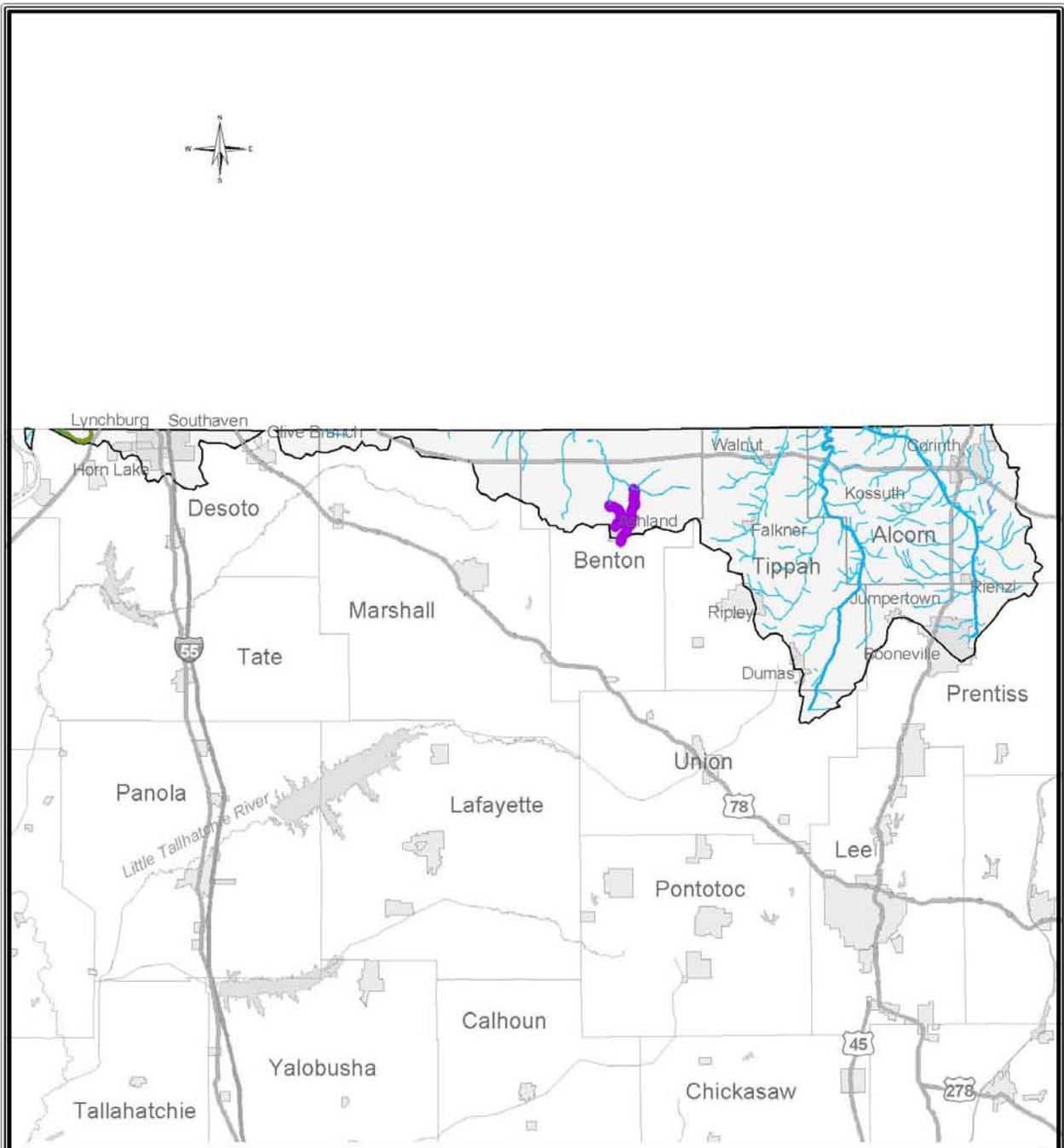
Mississippi Basins



### Legend

**Water Quality Standards Classification**

- |  |                                   |  |                   |
|--|-----------------------------------|--|-------------------|
|  | Public Water Supply               |  | Interstate        |
|  | Shellfish Harvesting              |  | US Highway        |
|  | Shellfish Harvesting & Recreation |  | County Boundary   |
|  | Recreation                        |  | Basin Boundary    |
|  | Ephemeral Stream                  |  | City              |
|  | Fish & Wildlife                   |  | Major River       |
|  |                                   |  | Reservoir or Lake |



## North Independent Streams Basin Water Quality Standards

This map produced by the Department of Environmental Quality (MDEQ), Office of Pollution Control, Surface Water Division, Water Quality Assessment Branch, Data Management Section on 8 April 2005.

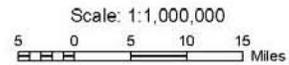
This map is contained in the State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters, Adopted 2005

Map Projection: Mississippi Transverse Mercator

The Mississippi Department of Environmental Quality makes no warranties, expressed or implied, as to the accuracy, completeness, currentness, reliability, or suitability for any particular purpose, of the data contained on this map.

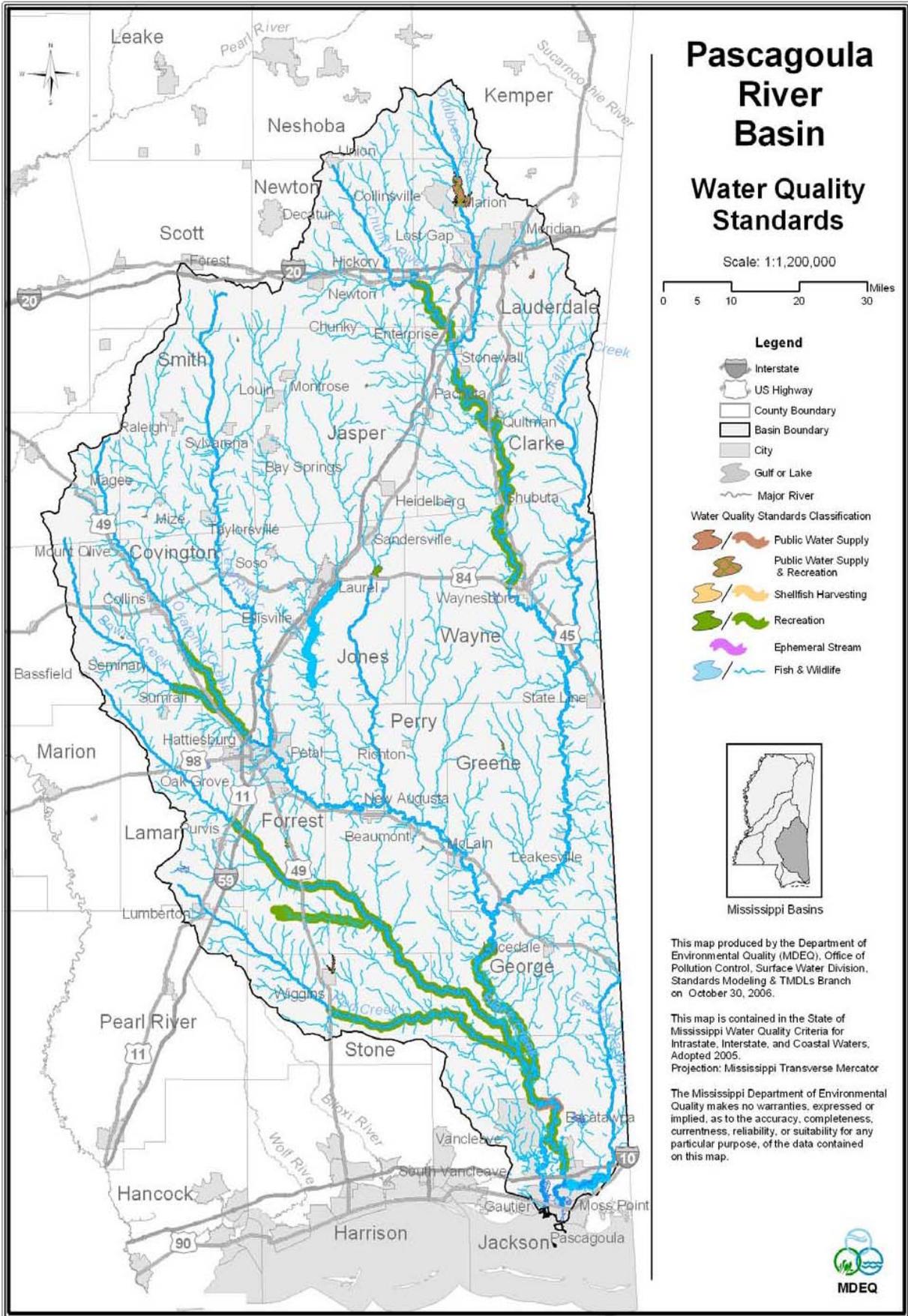


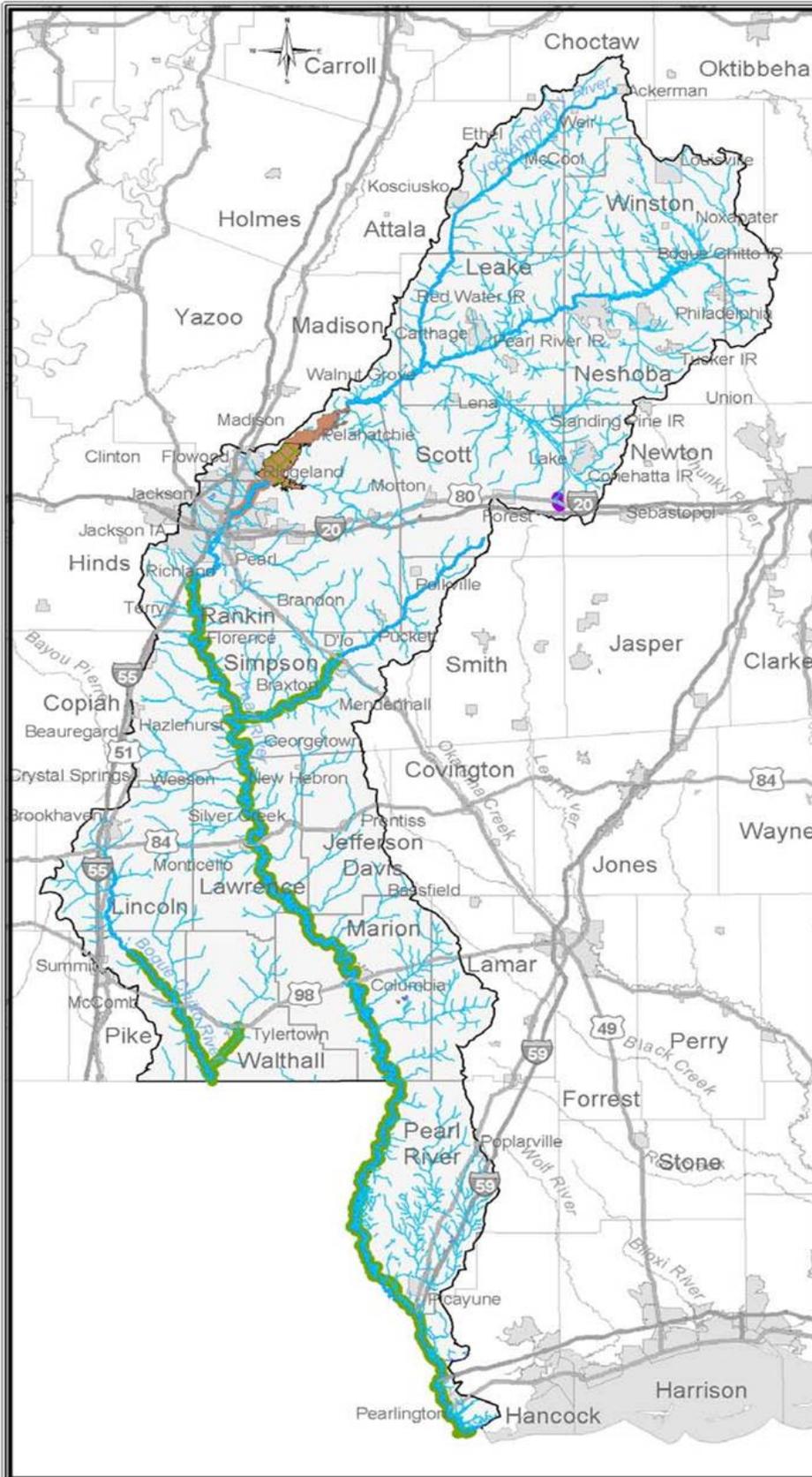
Mississippi Basins



### Legend







# Pearl River Basin

## Water Quality Standards

Scale: 1:1,500,000  
 5 0 5 10 15 Miles

### Legend

- Interstate
- US Highway
- County Boundary
- Basin Boundary
- City
- Gulf or Reservoir
- Major River
- Water Quality Standards Classification**
- Public Water Supply
- Public Water Supply & Recreation
- Shellfish Harvesting
- Recreation
- Ephemeral Stream
- Fish & Wildlife



Mississippi Basins

This map produced by the Department of Environmental Quality (MDEQ), Office of Pollution Control, Surface Water Division, Water Quality Assessment Branch, Data Management Section on 11 April 2005.

This map is contained in the State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters, Adopted 2005.  
 Projection: Mississippi Transverse Mercator

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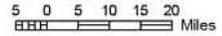




# Yazoo River Basin

## Water Quality Standards

Scale: 1:1,800,000



### Legend

- Interstate
- US Highway
- County Boundary
- Basin Boundary
- City
- Gulf or Lake
- Major River

### Water Quality Standards Classification

- Public Water Supply
- Shellfish Harvesting
- Recreation
- Ephemeral Stream
- Fish & Wildlife



Mississippi Basins

This map produced by the Department of Environmental Quality (MDEQ), Office of Pollution Control, Surface Water Division, Water Quality Assessment Branch, Data Management Section on 11 April 2005.

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