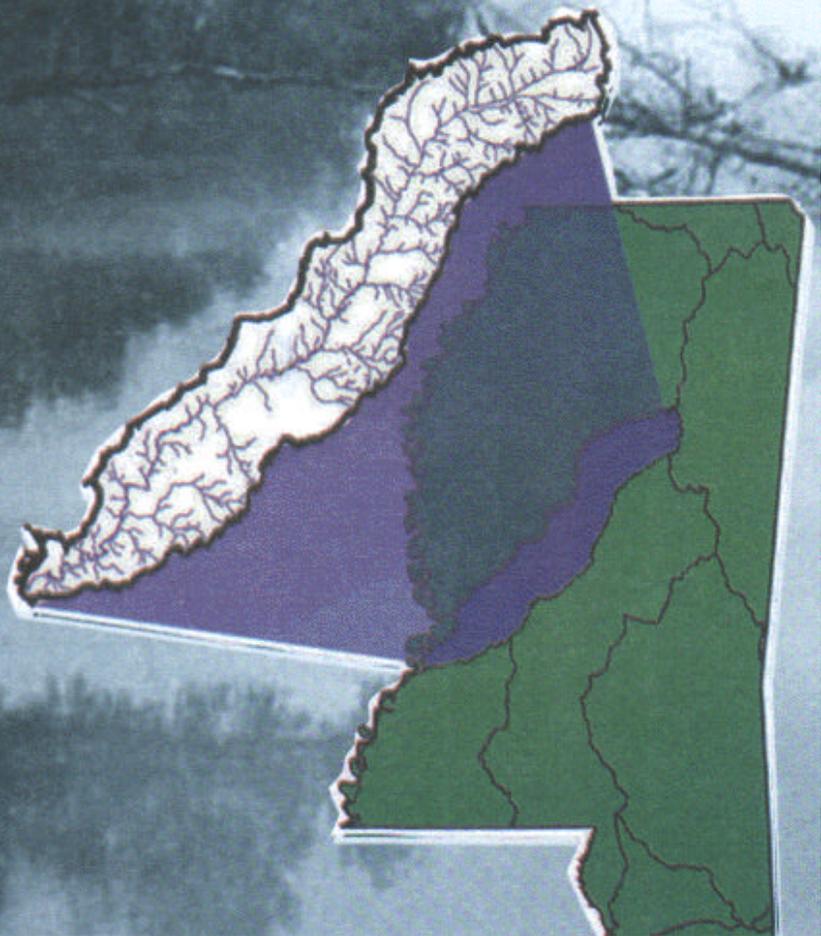


Big Black River Basin Status Report



ACKNOWLEDGMENTS

This document is a product of the Mississippi Department of Environmental Quality (MDEQ) and was developed by the Big Black River Basin Team at the direction of MDEQ's Basin Planning Committee. Information for this report was provided by MDEQ operating divisions and other state and federal resource agency partners. Copies of this report may be obtained by contacting MDEQ at (601)961-5171 or by visiting MDEQ's web site at [http:// www.deq.state.ms.us](http://www.deq.state.ms.us).

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FOREWORD

The Mississippi Basinwide Approach to Water Quality Management is an effort to conduct comprehensive water quality planning and to foster the implementation of practices that will result in water quality protection on a basinwide scale. This approach recognizes the interdependence of water quality on many related activities that occur in a drainage basin. Some of these activities include monitoring, assessment, problem identification, problem prioritization, planning, permitting, water use and land use. In Mississippi's Basinwide Approach to Water Quality Management these activities and their associated information will be integrated by basin, resulting in basin management plans and implementation strategies that will serve to focus water quality protection efforts.

The mission of the Mississippi Department of Environmental Quality (MDEQ) is to "safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation." In keeping with this mission, the overall goal of Mississippi's Basinwide Approach is to efficiently develop effective and consistent long range management

that all basins will receive equal focus. The Big Black and Tombigbee River Basins are in Group 1. The Yazoo River Basin and adjacent tributaries of the Mississippi River are in Group 2. The Pearl River Basin and South Independent Streams Basin and adjacent tributaries of the Mississippi River make up Group 3. The Pascagoula River Basin is in Group 4. The Coastal Streams, North Independent Streams and the Tennessee River Basins comprise Group 5. The grouping of the basins is shown in Figure 2.

The first activity under Phase I (Planning) of the Basin Management Cycle is preparing a Basin Status Report. This document is the Status Report for the Big Black River Basin providing an interdisciplinary overview of the basin by describing the basin's water quantity and water quality condition. Resource agencies and the public can use the information in this report to better understand the basin's current condition and to predict areas needing attention. The planning phase ends by prioritizing issues to be addressed in the basin during this cycle, and by identifying information gaps that should be filled before establishing basin management plans. Phase II involves gathering additional data to fill information gaps identified during the planning phase. In Phase III, the comprehensive information gathered in Phase II will be evaluated to clarify the causes and sources of water quality problems, identify high quality waters in need of special protection, and develop models or other tools to help with management plan development. Phase IV involves the development of a basin management plan and action strategies to address priority issues. Phase V begins implementation of the management plan.

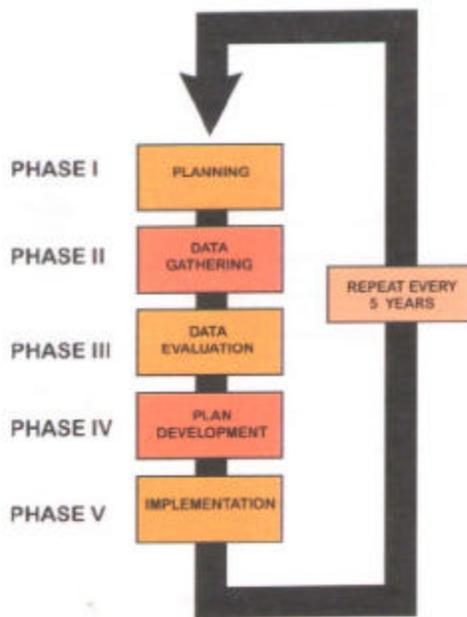


Figure 1. Basin Management Cycle under the Mississippi Basinwide Approach to Water Quality Management.

strategies that protect the quality and intended uses of Mississippi's water resources and allow for environmentally sound economic planning and development.

MDEQ is beginning to manage its water programs on a basinwide scale and intends to develop basin management plans for each of Mississippi's major river basins. These basins will serve as the hydrological boundaries that guide MDEQ's water quality activities. The majority of water quality management activities in these basins will be based on a repeating five-year management cycle (Figure 1). Because of the five-year rotation, basins will be placed in groups so

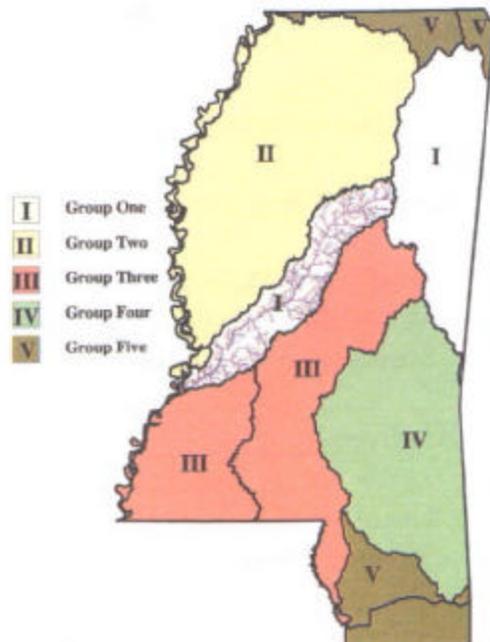


Figure 2. Basin Management Groups under the Mississippi Basinwide Approach to Water Quality Management.

BASIN DESCRIPTION

The Big Black River Basin (Figure 3) covers an area of about 3,400 square miles and has approximately 6,360 linear miles of river and streams. The basin is approximately 155 miles in length and averages 22 miles in width. The topography of the basin is hilly to gently rolling and is largely forested. However, significant cattle ranching and farming activities are present. The river system originates near Eupora in that portion of the Southeastern Plains and Hills Ecoregion known as the North Central Hills and flows southwest through the Mississippi Valley Loess Plains and Hills Ecoregion on its way to the Mississippi River. The river enters the Mississippi River just south of Vicksburg after flowing approximately 300 miles. Major tributaries to the Big Black River include Big Bywy Ditch, Zilpha Creek, Apookta Creek, Doaks Creek, Bear Creek, Bogue Chitto Creek and Fourteen Mile/Bakers Creek. The river and its tributaries are in a relatively natural condition. According to the "State of Mississippi Water Quality Criteria for Intrastate, Interstate and Coastal Waters," the Big Black River and its tributaries are classified as Fish and Wildlife streams. Waters in this classification are intended for fishing and for the propagation of fish, aquatic life and wildlife and are also intended for secondary contact recreation

(e.g., incidental contact with the water, including wading and occasional swimming). Streams have little base flow within the Big Black River Basin. In fact, the Big Black River at Bovina (with a drainage area of about 2,812 square miles) has a seven day, 10 year average low-flow of only 85 cubic feet per second. This amounts to about 0.03 cubic feet per second per square mile contribution to base flow in streams. The US Geological Survey operates and maintains three stream gages in the basin, publishing daily discharges from real-time data. Provisional real-time data for these gages are available at <http://www.mswater.usgs.gov>.

The Big Black River Basin encompasses all or part of 13 counties. However, two counties (Leake and Oktibbeha) have only a very small part of their total area in the basin. The basin is sparsely populated without large scale development. According to the 1990 census, approximately 200,500 people live in the basin, or 59 people per square mile. While the basin is not densely populated, the largest populations are in Hinds and Madison counties including the northwestern section of the City of Jackson, the City of Clinton and the City of Canton.



Figure 3. Big Black River Basin

BASIN WATER QUALITY

OBSERVED WATER QUALITY CONDITION

Basin water quality can be measured directly or indirectly. Monitoring of water quality, aquatic life, water quantity and soils provides direct information on the water quality in a basin and the water's potential for affecting human health and aquatic life. MDEQ and other resource agencies monitor the condition of surface and ground waters to determine their quality and quantity relative to human and ecological health. The following sections describe the condition of the basin's surface water, aquatic life, groundwater and soils based on recent monitoring data.

Surface Waters

MDEQ, in fulfilling Section 305(b) of the Clean Water Act, assesses Mississippi's current water quality conditions every two years. In 1996, MDEQ assessed (i.e., either directly from monitoring data or indirectly from land use information) approximately 50% of the state's surface waters. Only a small portion of the surface waters assessed in the Big Black River Basin were actually monitored (about 100 miles). The remainder of the miles assessed (not monitored) are considered waters of concern based primarily on land use. Principal causes of water quality problems in the basin are considered to

be nutrients, siltation, pathogens and organic enrichment from nonpoint source pollution. The monitored streams shown in Figure 4 are rated as good, fair or poor in their support of healthy and diverse aquatic life. Ratings are made by comparing the water quality of the streams to regulatory standards or to high quality reference streams. Stream water quality problems may result from one or more causes of pollution such as nutrients, siltation, organic material, pH, etc. These pollutants usually originate from municipal or industrial sources or are transported as nonpoint source pollution from the land by runoff.

MDEQ has issued 73 surface water withdrawal permits in the basin for irrigation purposes.

Ground Water

Virtually all of the potable water used in the Big Black River Basin is obtained from ground water. Although private domestic wells remain widely used in rural areas, most basin inhabitants have access to one of the 115 public water supplies that operate 175 large-capacity wells in the counties included in part or in whole in the basin.

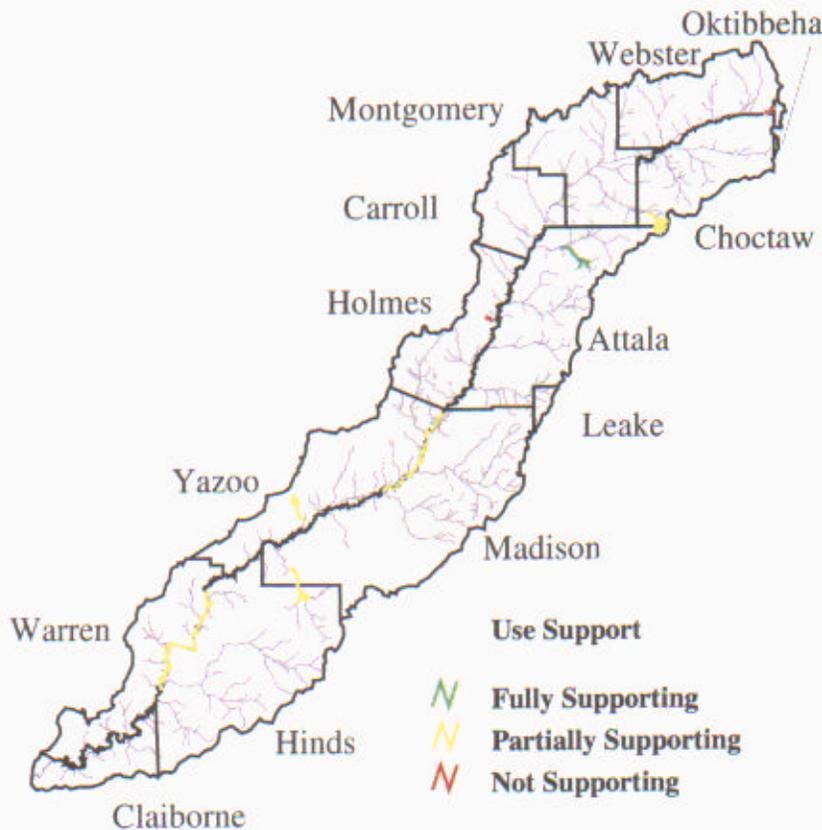


Figure 4. Big Black River Basin Use Support of Monitored Streams.

Well counts and withdrawal rates given in Figure 5 or in the remainder of this section are reported on a county wide basis and not just for the part of the county within the basin. Beneficial uses other than potable water supply (e.g., industrial, irrigation, etc.) account for relatively small volumes of the estimated 60 million gallons of ground water withdrawn each day in the basin. MDEQ has issued permits for approximately 260 groundwater wells for rural water associations and municipal water supplies in the basin.

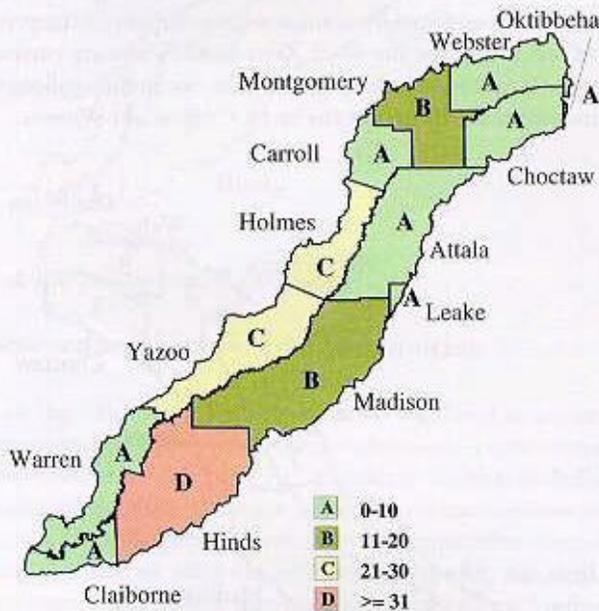


Figure 5. Public Water Supply Wells.

Numerous geologic formations outcrop in the Big Black River Basin (Figure 6). The recharge areas for nine distinct aquifers included in the basin are characterized by unconfined aquifers that furnish base flow to surface water bodies in the basin. The predominance of sandy strata at or near the land surface in these recharge areas denotes the relative susceptibility of these shallow aquifers to contamination from surficial activities. Most of the public water supply in the basin is obtained from deep confined aquifers. Ground water contamination has not been a problem throughout most of the Big Black River Basin. This is especially true in the Jackson metropolitan area which is underlain by a thick layer of Yazoo clay. Analytical results obtained from sampling 42 shallow water wells as part of MDEQ's Agricultural Chemical Program and from testing the regulated 175 public water supply wells show that the ground water quality of the basin is good. However, one contamination event in Yazoo County is noteworthy. Leaking underground storage tanks of gasoline contaminated the public water supply in the Town of Benton. This necessitated locating an alternative water supply and drilling expensive replacement wells.

Geologic Formations (fm) and Aquifers (aq)

- Paq Nabotha fm (lower Wilcox aq)
- Ew Wilcox fm (lower, middle, & upper aqs)
- EI Tallahatta fm (Winona-Tallahatta aq)
- Ewz Zilpha fm (confining unit) & Winona fm (Winona-Tallahatta aq)
- EK Kosciusko fm (Sparta aq)
- Ecm Cook Mountain fm (confining unit)
- Ec Cockfield fm & aq
- EJ Jackson group (confining unit)
- OI Forest Hill fm & aq
- Ov Oligocene aq
- Mc Catabaux fm & aq
- Os Alluvium

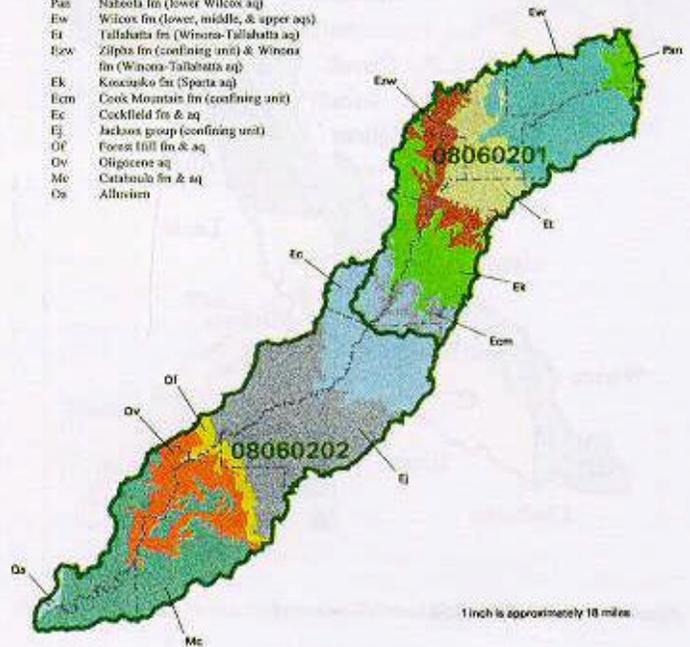


Figure 6. Geologic Formations and Aquifers

INDIRECT INDICATORS OF WATER QUALITY CONDITION

Given that only a small percentage of the basin's ground water and surface waters have actually been monitored, it is important to have some means for assessing the condition of the remainder of the basin and for targeting management efforts. Indirect indicators of the basin's water quality condition can provide a means for getting a sense of the basin's overall condition, thus pointing out areas that need additional attention and monitoring, identifying *potential* problems, and tracking improvements. The following sections present some of the indicators currently available for a basinwide assessment.

Livestock Operations

Livestock production is a significant portion of the agricultural economy in Mississippi and a fairly significant portion of the land use in some areas of the Big Black River Basin. When livestock are found in high numbers or are confined for concentrated feeding operations, the high volumes of generated waste (e.g., manure) raise the potential for surface water runoff and ground water contamination if proper management practices are not in place. Based upon data gathered from the Mississippi Agricultural Statistics (beef cattle and calves) for 1997 and MDEQ permit data (swine) for 1997, the total number of animals in the Big Black River Basin is estimated at 171,600. This represents a total of 92,600 beef cattle and calves and 79,000 swine. Swine data include only those facilities that exceed 2,500 head and therefore require a federal permit. Figure 7 on page 8, shows the distribution of the estimated total number of livestock within the basin.

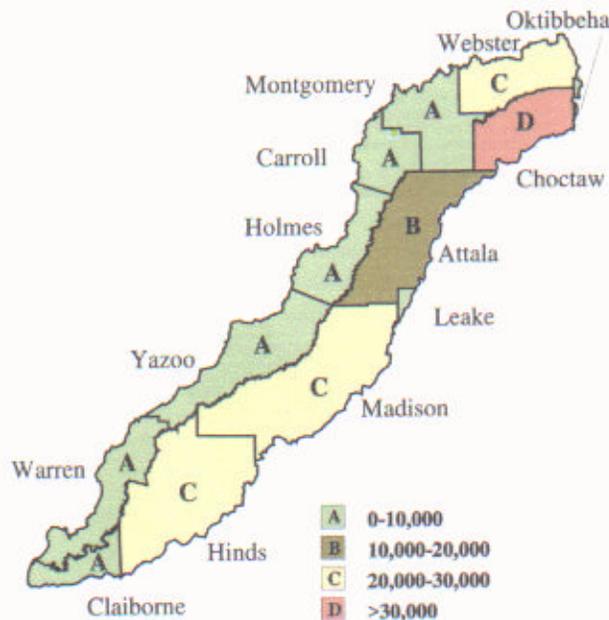


Figure 7. Number of Livestock

Mining Operations

Because sand and gravel mining involves major local changes to the earth's surface, ground and surface water quality and flow patterns can be greatly affected. This is especially true when mining activities take place either in a stream or immediately adjacent to a stream. It is estimated that a total of 427 surface mines exist in the counties included in part or in whole in the Big Black River Basin. These mines are located throughout the counties shown, with the highest concentration being in Hinds and Holmes counties (Figure 8). An exact count of mining operations in the basin is not known at this

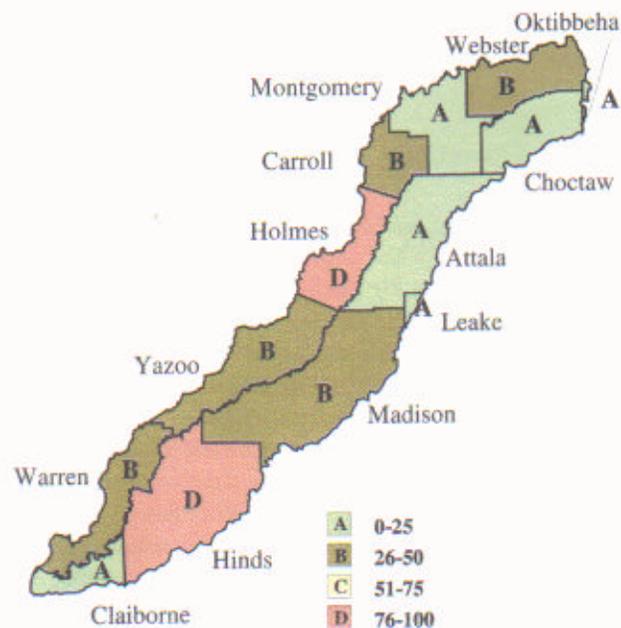


Figure 8. Mining Operations.

time. To obtain a better understanding of the impact of mining on water quality in the basin, a detailed water quality assessment is needed.

Wastewater Dischargers

A National Pollutant Discharge Elimination System (NPDES) permit is issued to any facility discharging treated wastewater to state surface waters. Facilities receiving NPDES permits include domestic sewage treatment plants (e.g., for cities, subdivisions, schools and trailer parks) and industrial processing plants. Figure 9 shows the number of permitted domestic sewage treatment dischargers (a total of 56) within the Big Black River Basin. There are currently two major (i.e., discharge flows greater than one million gallons per day) municipal dischargers in the basin, Canton and Winona.

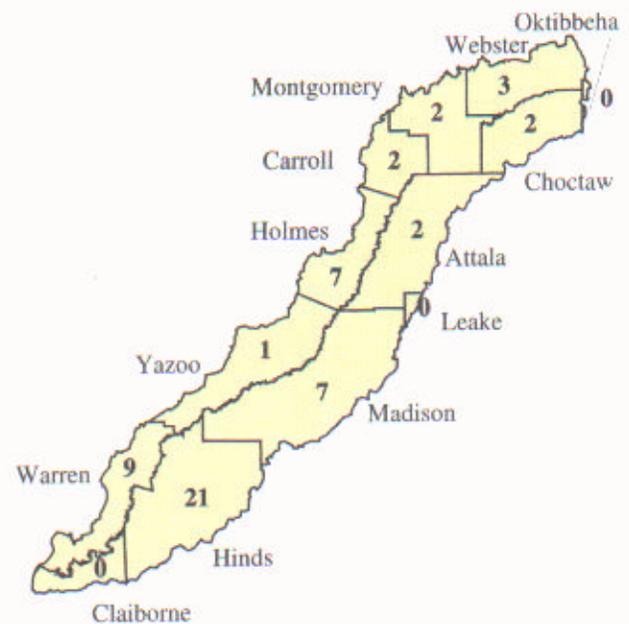


Figure 9. Permitted Domestic Sewage Dischargers

There are approximately 22 industrial point source dischargers and five industrial park dischargers in the basin. Several types of industries are represented by these dischargers including timber products; energy production; chemical, agricultural and metal manufacturing; and other miscellaneous industries. Figure 10, on page 8, shows a count of industrial point source dischargers (including industrial parks) within the basin.

While MDEQ operates the NPDES program in a way that seeks to maintain in-stream water quality standards, occasionally a few facilities violate their permit requirements. When this happens, MDEQ reacts promptly to cause the facilities to return to a state of compliance. Figure 11, on page 8, shows the number of facilities within the basin for which formal enforcement actions were taken in the past five years. These enforcement actions were taken due to violations of one or more of the conditions contained in the NPDES permits of the facilities.



Figure 10. Permitted Industrial Dischargers



Figure 11. NPDES Permit Enforcement Actions (1993 - 1998)

Sewered and Unsewered Communities

The Big Black River Basin includes 73 organized or incorporated communities. Twenty-one of these communities have central sanitary wastewater collection and treatment facilities, including two major dischargers. There are 52 organized communities without centralized collection and treatment systems. Of the communities with facilities, six need treatment plant upgrades, two need major treatment plant repairs, four need to remove excessive infiltration/inflow from their systems and five need to extend their sewer service. Of the communities without central wastewater collection and treatment facilities, four clearly need such facilities and five do not. MDEQ has no data for the 43 other unsewered communities in the basin. Communities without central sewage collection and treatment are assumed to use individual residential onsite wastewater treatment systems. Such systems include septic tanks or small package treatment systems with or without on-site disposal. Individual treatment systems should also be in use by those living in the rural areas of the basin. When such systems are not used, not maintained or are used in unsuitable soils, contamination of ground water or surface waters is probable, and public health concerns will exist.

Several statewide financial assistance programs are available for funding potential water pollution abatement and drinking water system improvement projects. MDEQ operates the Clean Water State Revolving Fund Loan Program (CWSRF), and is contracted to the Mississippi Department of Health to administer both the Local Governments and Rural Water Systems Improvements and Emergency Revolving Fund Loan Programs. The CWSRF has an average of \$26 million available each year, the Drinking Water Improvements Loan Fund provides about \$10 million each year, and the Drinking Water Emergency Loan Fund has about \$5 million to date, to fund water pollution control and drinking water system construction projects, respectively.

Hazardous Waste Operations

Numerous uncontrolled hazardous substance sites throughout the Big Black River Basin pose potential localized threats to human health and the environment through releases to the soil, sediment or groundwater. An uncontrolled site is a facility or location where hazardous or toxic substances have been released into the environment and where there is no federal environmental program to handle the problem. These sites have been contaminated by leaking chemi-

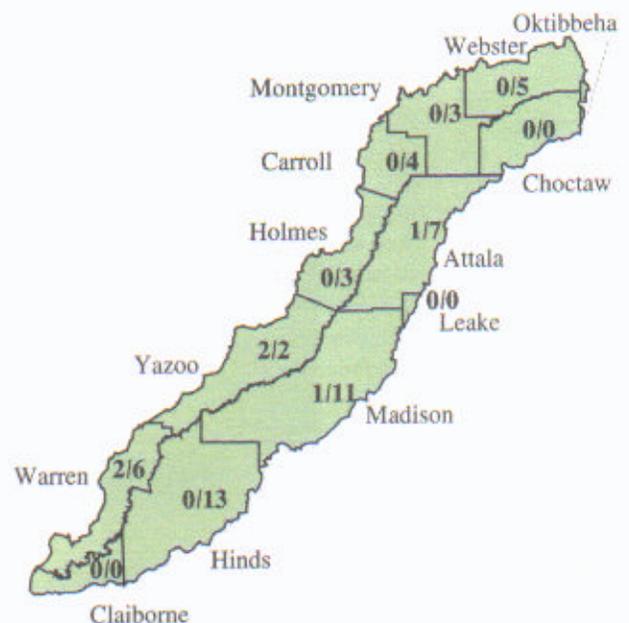


Figure 12. Active Uncontrolled Hazardous Substance Sites Per Total Sites

cal tanks (both above and below ground), abandoned landfills and various chemical spills. The majority of the sites are found in those areas of the state that are highly industrialized. MDEQ has regulatory authority over all 58 sites in the basin. Six are being actively investigated by MDEQ or have remediation under way. Figure 12 shows the ratio of the number of active sites (those on which MDEQ is currently working) to the total number of sites within the basin.

Solid Waste Management

Solid wastes are garbage, refuse and commercial and industrial non-hazardous wastes. In the past, state and federal guidelines on the disposal of solid wastes were not as stringent as they are now. As a result, older dumps and other sites where solid wastes were disposed may threaten ground and surface water resources in the basin. In addition to the potential problems posed by older landfills, the illegal random dumping of solid wastes also threatens to pollute ground and surface waters. In recent years, new guidelines on siting and operating landfills have greatly reduced the risk of contamination from solid wastes. There are three active municipal landfills operating in the basin; they are located in Durant, Canton, and near Jackson. There are no known water quality problems associated with these three facilities.

Air Quality

The ambient air quality in this basin is in attainment with National Ambient Air Quality Standards (NAAQS) for carbon monoxide, ozone, nitrogen dioxide, particulate matter (10 micrometers or less),

sulfur dioxide, and lead. MDEQ does not currently have any data on particulate matter of 2.5 micrometers or less; therefore attainment status for particulate matter of this size or less is not known at this time. Monitoring for this smaller particulate matter is scheduled to begin in the fall of 1998. MDEQ does not monitor for deposition of air pollutants in the Big Black River Basin. Therefore, the impact of air pollutants on water quality, if any, is not known.

Pollution Prevention

MDEQ has a statewide multimedia pollution prevention program, whose goal is to prevent or reduce the amount of pollution released to state lands, air or waters. This program encourages the reduction of pollution at the generating source and the environmentally safe recycling of pollutants where feasible. Since 1988, MDEQ has worked diligently to prevent pollution by providing technical assistance, technology transfer and program development to generators of hazardous and non-hazardous wastes. Working under a legislative mandate to reduce waste in the state by 25%, MDEQ has conducted numerous pollution prevention programs in the Big Black River Basin. Grants of approximately \$700,000 have been awarded for solid waste assistance, pollution prevention, recycling waste tires and handling hazardous household wastes. Also, MDEQ has reviewed or approved 170 industrial pollution prevention plans, reports and assessments for facilities in the basin and conducted about 40 pollution prevention work shops or seminars. In addition, MDEQ has provided pollution prevention technical assistance to 50 small businesses in the basin. There are 23 recycling facilities operating in the basin.

ECOLOGICAL REGIONS

Ecological Regions, or Ecoregions, identify areas of relatively similar ecological systems. They are based upon patterns of land use, landform, natural vegetation and soils. In certain areas, however, ecoregions do not provide enough detail to meet the needs of scientific studies, and further refinement into subcoregions is necessary. Figure 13 shows the ecoregions and subcoregions present in Mississippi. Ecoregions and subcoregions provide resource managers with a logical regional strategy for locating representative reference sites, designing sampling schemes, analyzing and evaluating data and assessing regional patterns of attainable terrestrial and aquatic ecosystem quality.

Southeastern Plains and Hills

The northern 40% of the Big Black River Basin flows through the Southeastern Hills and Plains Subcoregion (#65e on Figure 13). This irregular, belted plain of low hills is made up of the Red Hills

(also known as the North Central Hills) and the Pontotoc Ridge. Several resistant geologic formations create low lines of hills, some with cliffs on one side, thus giving diversity to this subcoregion. Changes in elevation range from 100 to 300 feet. Soil types range from loams to clays that tend to be poor in nutrients, and thus have low fertility. Forest cover is extensive with an oak-hickory-pine mix. Predominant land use is woodland and forest with some crop land and pastures. Because this is a large and diverse subcoregion, the flow regime and water chemistry in streams is variable. While shifting sands are the most commonly encountered stream substrate, gravel or clay deposits are found in some locations.

Mississippi Valley Loess Plains and Hills

The majority of the Big Black River Basin is contained within the Mississippi Valley Loess Plains and Hills Ecoregion, often called Loess Bluffs or Bluffs (#74 on Figure 13). This ecoregion consists

primarily of gently rolling hills and irregular plains sometimes with 100 to 200 feet of local elevation change. The most distinguishable characteristics of this ecoregion are the thick deposits of loess (in excess of 60 feet) that cap many of the hills or bluffs. This feature is particularly noticeable along the western edge of the ecoregion, bordering the adjacent Mississippi Alluvial Plain. The soils of this ecoregion are generally steep, deep, silty and erosive. Gravels are sometimes exposed at the bases of the bluffs and in the streams, particularly in the southern one-third of the ecoregion.

Vegetation consists of oak-hickory forests to the west, and oak-hickory-pine forests in the eastern portion of the ecoregion. Distinct communities of vegetation are found in the carved loess due to variations in slope and different exposures to sun, moisture and wind. Sites with distinct communities of vegetation include ridges and dry slopes, moist slopes, streambeds and ravines, bottomland hardwoods and small cypress swamps. Land use in the northern two-thirds of this ecoregion is primarily agriculture and pastureland, and many of the streams have been deforested and channelized. The southern one-third is mostly forest with some pastureland.

Mississippi Alluvial Plain

The mouth of the Big Black River is contained within the Mississippi Alluvial Plain, or Delta, Ecoregion (#73 on Figure 13), which is one of the most distinct areas within the state. It is comprised of alluvial deposits of sand, gravel, clay and some wind-deposited loess. Soils are deep and generally impermeable, making drainage poor. This ecoregion is mostly a flat, broad flood plain with river terraces and levees providing the main elements of relief. Maximum relief is only a few feet per mile. As a result, natural streams of this region are sluggish and meandering with very little gradient, and hence, have low re-aeration rates. Native vegetation for this ecoregion was previously bottomland hardwoods, with plentiful wetland timber such as bald cypress and tupelo gum. However, clearing for agriculture has removed significant amounts of this timber. Most of the drainage in this ecoregion has very limited woody vegetation adjacent to the watercourses. The predominant land use in this ecoregion is large-scale agriculture. However, areas with pastures, woodlands, forests and swamps are also present.

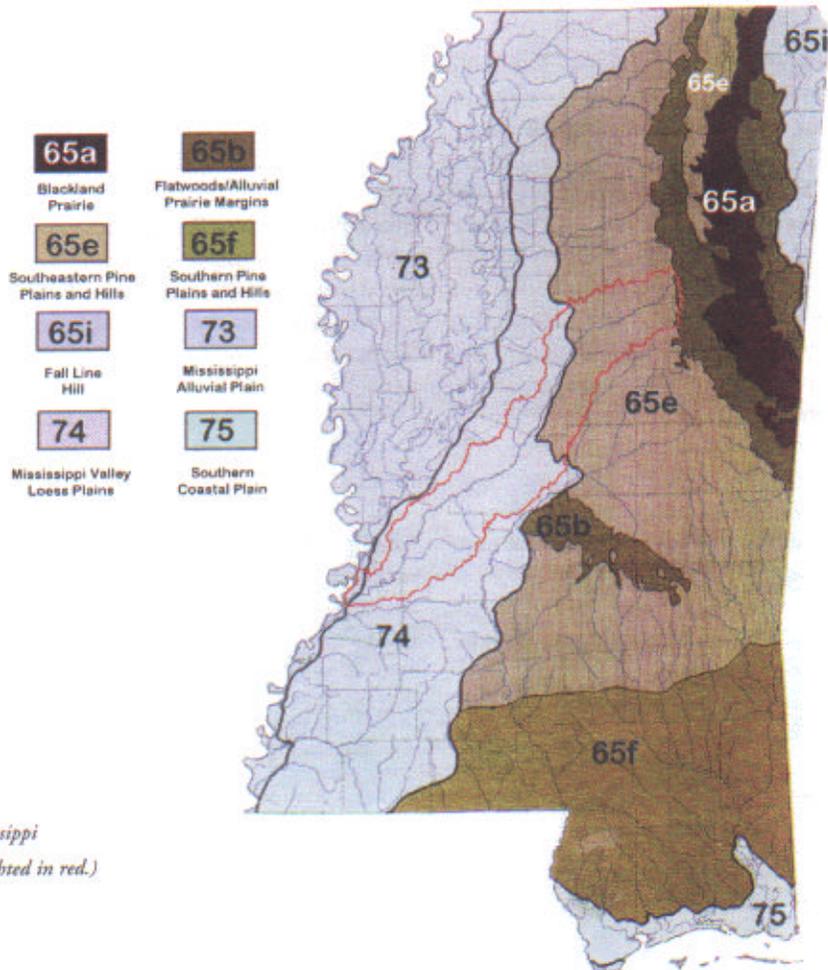


Figure 13. Ecoregions of Mississippi
(Big Black River Basin highlighted in red.)

BIODIVERSITY

Life of Streams

The Big Black River is one of the last remaining undammed river systems east of the Mississippi River. Thus, there are no large reservoirs within the Big Black River Basin. The Big Black River is known for its outstanding catfish fishery. Access to the River is provided by the many boat ramps constructed by the Mississippi Department of Wildlife, Fisheries and Parks. These ramps open many segments of the river to both commercial and recreational fishermen, who take crappie, bream and buffalo fish in addition to catfish. A 50 mile stretch of the river in Warren and Yazoo counties provides habitat for the rare blue sucker fish. Also within this reach are mussel beds, habitats for several rare mussels and a rare aquatic snail. Several of the small tributaries in the headwaters of this basin harbor a diverse

community of fishes and macroinvertebrates (e.g., worms, mussels, crayfish, fresh water shrimp and aquatic insect larvae).

Significant Sites

Ecoregional Reference Sites are those reaches of a stream that are considered to represent "least-disturbed" conditions within a defined ecoregion or subecoregion. A reach of Scoobachita Creek near Hesterville is used as an Ecoregional Reference Site for water quality studies within the Southeastern Plains and Hills Subecoregion. The Natchez Trace Parkway passes through the southern portion of the Big Black River Basin, providing additional recreational opportunities.

WETLANDS

Swamps, marshes, bogs and bottomland hardwood forests are known collectively as wetlands. Only twelve states have more than Mississippi's approximately four million acres of wetlands. Many people only think of wetlands as places that breed mosquitoes, harbor snakes and make water quality bad. However, wetlands actually play an important role in maintaining and improving the water quality of Mississippi's rivers and streams. Due to their natural position between dry land and open water, wetlands intercept surface water runoff. Thus, wetlands are an efficient and cost-effective way to control nonpoint source pollution. For instance, runoff from agricultural land may put excess nitrogen and phosphorus (the components of fertilizers) into rivers and streams. Wetlands can absorb these nutrients as well as return some of the nitrogen back to the atmosphere. They can also filter sediment from surface water runoff. Consequently, pollutants attached to the sediment are also removed from surface waters. Wetlands also recharge aquifers, attenuate flooding and help to control erosion.

In addition to their ability to enhance water quality, wetlands are among Mississippi's most productive habitats providing diverse habitats for a variety of mammals, birds, reptiles, amphibians and fish. Nearly one-third of the nation's endangered and threatened species

live in or are dependent on wetland habitats. In addition, millions of waterfowl use them for breeding and wintering grounds every year. In Mississippi alone, coastal wetlands support a \$50 million commercial and recreational fishery.

Because of their benefits and important functions the protection of wetlands in Mississippi is mandatory. Authorization is required for any activity that will result in the discharge of dredged or fill material into waters of the state, including wetlands. The nearest US Army Corps of Engineers district office can help identify whether wetlands are on your property and advise you whether a proposed activity will require a permit. The Natural Resources Conservation Service can supply the same information for planned agricultural activities.

The Big Black River Basin contains approximately 169,000 acres of wetlands, with about 157,000 being bottomland hardwood forests. Bottomland hardwood forests are the vast forests found on the river flood plains of the southeastern United States. Approximately 7,200 acres of what were once wetlands are now used for agricultural activities.

LAND USE AND LAND COVER

The major land uses and land covers in the Big Black River Basin are shown in Figure 14. The basin is predominantly covered by forests that are evenly distributed and account for about half of the total land area of the basin. Pasture and rangelands cover about a third of the total land area. Crops and wetlands cover the majority of the rest of the basin's area. The amount of urban area is very small with most occurring in Hinds and Madison counties. Figure 15 gives a statistical summary of the basin's land use and land cover.

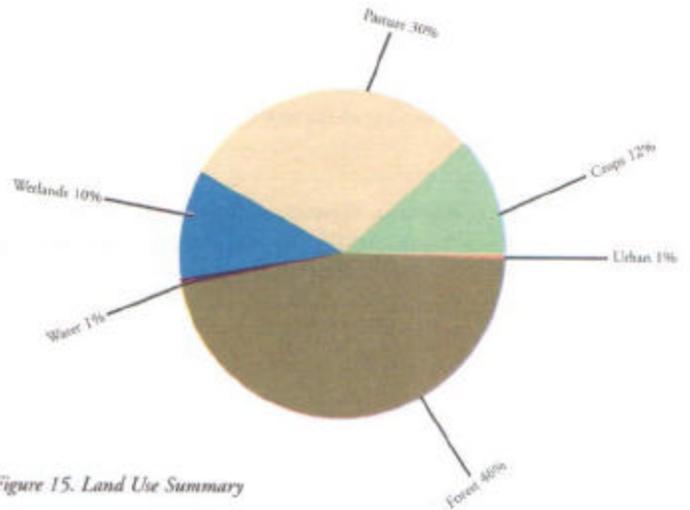


Figure 15. Land Use Summary

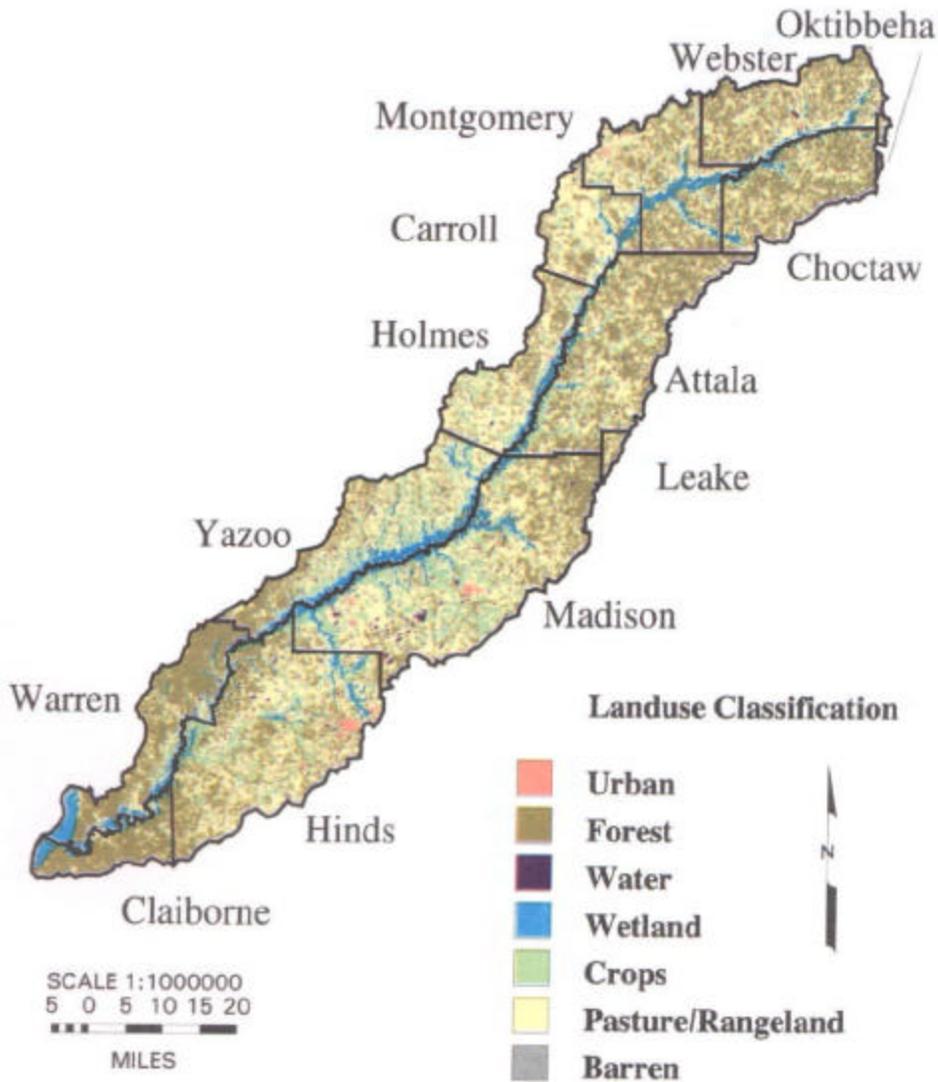


Figure 14. Major Land Use and Land Cover Categories

PUBLIC INVOLVEMENT AND PARTICIPATION

To adequately protect the water resources of the Big Black River Basin, the involvement of the basin's residents is essential. MDEQ encourages all Mississippians to exercise responsible stewardship over the state's natural resources for the benefit of present and future generations.

As the five phases of the Basin Management Cycle are carried out in the Big Black River Basin, MDEQ is interested in involving the

public. MDEQ is forming a Basin Stakeholders Group which will serve as a forum for sharing information with interested groups in the basin. The Basin Stakeholders Group will also provide local groups and their associated resource agencies or organizations with the opportunity to provide input on issues, priorities, strategies and implementation activities. If you or your organization would like to participate on the Basin Stakeholders Group, contact the Big Black River Basin Team Coordinator at:

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