

2.0 ***BASIN MANAGEMENT PLAN FOR THE ALABAMA RIVER***

This basin management plan for the Alabama River Basin has been developed to advance the mission of the Alabama Clean Water Partnership and its participants to *restore, maintain, and protect the waterways of the Alabama River Basin*. It is also called for in the State of Alabama's Nonpoint Source Management Program and strives to achieve the Program's goals.⁸ The completion of the plan constitutes another successful step forward in the State's management of nonpoint source pollution, especially within the Alabama River Basin. Whereas, this plan is the first of its kind for the basin and mirrors ongoing efforts in other basins of the state.

Being the first document of its type for the Alabama River Basin, this basin management plan has several goals and objectives it strives for. Two basic goals have guided its development. These two goals are: ***1) Educate readers about nonpoint source pollution in the Alabama Basin and how it can be effectively managed and, 2) Serve individuals and organizations working on the management of the Alabama River Basin to coordinate their activities.***

Although it is the first of its kind, this document is one piece of a very large and complex puzzle that consists of related studies and plans that have focused on the management of the of the Alabama River Basin. And, like all puzzle pieces, this piece or plan should tell us enough about the rest of the pieces so that we can fit it into place. Therefore, the plan was built upon the results of previous efforts and was developed to meet the following objectives:

- identify and characterize pollution sources
- estimate pollutant load reductions
- describe nonpoint source pollution control measures
- estimate technical and financial assistance needs to implement recommendations
- increase public awareness of watershed issues
- schedule pollution control management measures

⁸ See Chapter 1 of the *ALABAMA NONPOINT SOURCE MANAGEMENT PROGRAM, August 2003*, ADEM Nonpoint Source Unit. Pages 1-5. "Goal 4. Develop 10 river basin management plans (8-digit Hydrologic Unit Code Cataloging Unit) that present practical "big-picture" goals, objectives, and milestones to protect impaired or threatened waters. Goal 5. Develop 10 sub-watershed protection plans (11-14 digit Hydrologic Unit Code subwatershed number) to provide reasonable assurance that load allocations for targeted sources and causes of NPS pollution are being addressed and water use classifications and standards can be restored as expeditiously as possible. Goal 6. Support the efforts of the Alabama Clean Water Partnership (CWP) Program."

- describe plan milestones
- identify monitoring strategies

The development of this basin management plan was highlighted by a process where people met and discussed issues about Alabama's waters and their watersheds. The discussions focused on how to better understand how we impact our waters and to develop guidelines for ourselves to decrease the impacts we have on them by 1) encouraging the positive, responsible things we are already doing to protect Alabama's waters and 2) informing each other and promoting change of the behaviors and actions that have a negative impact on our environment, especially water quality. In this regard, the basin management plan reflects our knowledge about the waters and to state how we intend to manage them into the future.

This basin management plan has a few basic ingredients. It contains information and data that describes the river and the basin around it. The plan explains water quality issues in the watershed. And, most importantly, it proposes recommendations for managing these issues. This written document becomes a central source of information about the basin that helps educate people and enables them to make informed choices about their activities and their impacts on Alabama's waters. Herein lies the true focus of the plan: The Plan strives to influence the way people act to promote the stewardship of Alabama's waters.

Because the plan is focused on people, it must be created by people, especially those individuals that have a great stake in the process. We call these people *stakeholders*. In Alabama, there is a collaborative setting that brings stakeholders together in a partnership for the management of the State's waters. Some stakeholders attend partnership meetings for individual reasons and others come to represent the interests of businesses and organizations. This working partnership is called the Alabama Clean Water Partnership (ACWP).

2.1 Alabama Clean Water Partnership (ACWP)

The ACWP is a statewide nonprofit organization that incorporated in 2001. Guided by a Board of Directors and a Statewide Coordinator, it is a coalition of public and private individuals, companies, organizations and governing bodies that work together to manage water resources and aquatic ecosystems for Alabama. The purpose of the ACWP is to bring together

many diverse groups in order to coordinate their efforts, to share information, to plan management activities and to allocate resources. The ACWP was organized to allow these diverse interests to develop, support, and coordinate efforts that aim to restore, maintain, and protect the waterways of Alabama. ACWP Partners enjoy, 1) improved communication, 2) data and information sharing and consolidation, 3) opportunities for improved coordination, and 4) opportunities for enhanced collaboration.

Under the auspices of the Alabama Department of Environmental Management, USEPA, and private interests, the ACWP has successfully spearheaded the basin management planning effort for the rivers of Alabama. By adopting the “basin” or “watershed” approach to the management of

Major River Basins Represented in the Alabama Clean Water Partnership	
Alabama - Tombigbee	Conecuh-Sepulga
Black Warrior	Coosa
Cahaba	Coastal
Chattahoochee-Chipola	Tallapoosa
Choctawhatchee-Pea-Yellow	Tennessee

water quality issues, constituencies are invited to participate on behalf of their respective basins and sub-basins. The goal of this process is to address water quality issues at the smallest scale possible because water quality problems – especially nonpoint source pollution problems – are the culmination of innumerable small pollution inputs and, therefore, require a widespread educational response to produce cumulative and positive results.

2.2 Alabama-Tombigbee CWP Steering Committee

The ACWP is made up of 10 basin groups representing 11 major river basins of the State. For each basin, a Steering Committee has been formed consisting of representatives from the general public, agricultural business, major industries, governmental agencies, private organizations and universities. The Alabama/Tombigbee Clean Water Partnership Steering Committee (a.k.a. AlaTom Steering Committee) is one of these committees.⁹ Over 70 people representing counties throughout the two basins make up this committee. Its primary purpose is to serve as a coordinating body for stakeholders from the Alabama and Tombigbee River basins. The Committee meets on a quarterly basis in Montgomery. The membership of the Steering Committee is summarized below.

⁹ There is currently one steering committee for both the Alabama River and Tombigbee River basins because of limited funding to the ACWP. Each basin would have its own steering committee if funding were available.

Membership of the Alabama-Tombigbee Steering Committee	
Alabama Department of Economic Affairs – Office of Water Resources	Central Alabama Regional Planning and Development Council
Alabama Clean Water Partnership	CH2M Hill
Alabama Coastal Foundation	City of Montgomery
Alabama Department of Environmental Management	Coosa Alabama River Improvement Association
Alabama Dept. of Public Health	Dee River Ranch
ALFA	Georgia-Pacific
Alabama Forestry Commission	Gulf States Paper
Alabama Home Builders Association	Hand Arendall/Alabama Coastal Foundation
Alabama Legacy	MS Department of Environmental Quality
Alabama Power Corporation	Olin
Alabama Pulp and Paper Council	Plum Creek Watershed Association
Alabama River Pulp	Rayonier, Inc
Alabama Rivers Alliance	Tenn-Tom Water Development Authority
Alabama Soil and Water Conservation Committee	The Nature Conservancy
Alabama Water Watch	The Water Works and Sanitary Sewer Board of the City of Montgomery
Alabama-Tombigbee Regional Commission	Tombigbee Resource Conservation & Development Council
	University of South Alabama Foundation
Auburn University	University of West Alabama
Boise Cascade	United States Army Corps of Engineers
Business Council of Alabama	United States Department of Agriculture – Natural Resource Conservation Service
Capital Ideas	United States Geological Survey

2.3 Sub-basin Stakeholder Groups in the Alabama and Tombigbee River Basins

In addition to the overarching support of the ACWP and the AlaTom Steering Committee, this basin management planning process heavily relies on input from a wide array of local stakeholders with various perspectives on water resource management issues. Local knowledge of the watershed, feasibility of management recommendations (ground-truthing) and community “buy in” were key elements of the planning process and should come through local input. These local stakeholders are typically the individuals and organizations with perspectives related to the basin from a smaller, more intimate, or grassroots scale, which means they are property owners, local resource managers and/or representatives of local businesses, industry, municipal government, and civic organizations. Some stakeholders were already involved in the process; other stakeholders were invited to participate.

In the Alabama and Tombigbee Basins, the core group of local or sub-basin stakeholders were recruited from organizations participating in the ACWP and the AlaTom Steering Committee. Local organizations and watershed groups were also invited to attend. In the Alabama River Basin, several such watershed-based grassroots organizations exist: Catoma Creek Watershed Association, Rambranch Creek Association, Save and Preserve Swift Creek and the Wilcox Friends of the River.

Local citizen activists, such as water quality monitors, are an important source of local input and volunteer resources. For instance, in the Alabama River Basin, volunteers play an active role in water quality monitoring. These citizen monitors are made up Boy Scouts, high school students, retirees and working parents. Such volunteers are coordinated by Alabama Water Watch and the Alabama Cooperative Extension System. They will be discussed in more detail later on in the plan.

An information and education component beyond the quarterly meetings of the AlaTom Steering Committee involving local stakeholders was a crucial element to this basin management planning effort. This component provided the opportunity for stakeholders to participate in the planning process and to contribute to the basin management plan(s). It is common that stakeholders like governmental agencies and private interest groups have staff or representatives assigned to the planning process. On the contrary, the “working public” are more difficult to engage because of a lack of access to meetings (i.e., working people are not afforded the time to attend daytime agency meetings) or the lack of awareness (i.e., citizens typically do not monitor the daily functions of a governmental agency unless those functions are highlighted in the popular press). Therefore, the Alabama Clean Water Partnership (ACWP) and its consultant team provided opportunities for stakeholder identification, attendance and participation in the process.

Promoting attendance to a stakeholder participation program in support basin management efforts in the Alabama and Tombigbee Basin was challenged by the great size of the two basins. Combined, the two basins encompass almost a quarter of the area of the entire State of Alabama: A total of 19,779 square miles (Area of Alabama = 52,423 sq. miles) and 54 counties (including over 6,000 sq. miles and 22 counties in Mississippi). Long travel distances

within these basins were a practical hurdle for stakeholders to attend stakeholder meetings and demonstrated that opportunities should be created on a smaller, more convenient scale. Stakeholder group organization on a smaller geographic scale would also promote water quality management at the watershed and sub-watershed scale. At this smaller scale, planning targets a smaller number of people and activities compared to a multi-county or multi-state level where the target population and area increases to an impractical scale.

With a limited number of existing stakeholder groups to call on as well as financial constraints, the AlaTom Steering Committee targeted this basin management plan and its ongoing public information efforts at the *sub-basin* level. Five sub-basins, three in the Alabama River Basin (Upper, Middle and Lower Alabama), and two in the Tombigbee River Basin (Upper and Lower Tombigbee), were designated to be the scope of the management plans. The supporting stakeholder outreach component of the plans were designed in accordance with this approach.

A stakeholder and public participation program was designed to build on past efforts of the ACWP and the AlaTom Steering Committee. Its purpose was twofold: 1) to support the development of the Alabama and Tombigbee Basin Management Plans and, 2) to engage a diverse population of stakeholders with interest in participating in the basin management planning process and the Alabama Clean Water Partnership. The creators of the stakeholder outreach components, were the ACWP's consultants, Kleinschmidt Associates, and the Alabama Pulp and Paper Council (APPCO), which is a founding partner in the ACWP and has a history of sponsoring efforts to manage the Alabama and Tombigbee. In fact, an APPCO representative (Mr. Roy McAuley) served as the first chairman of the ACWP Board of Directors and AlaTom Steering Committee. The organization was also responsible for hiring and supporting a facilitator to coordinate sub-basin stakeholder groups and to interface with the Steering Committee.

The current *Basin Facilitator*, Mrs. Ashley Henderson, serves as the lead coordinator for APPCO's involvement in facilitating stakeholder input throughout the basins. The Facilitator role has a broad range of outreach and coordination duties that make the position an essential element of the public participation component. Below is an excerpt from the job description of the Basin Facilitator; this list of duties highlights the wide breadth of responsibility for this

position and the critical importance of this one position in the scheme of public participation and stakeholder involvement in the Alabama – Tombigbee River Basin Management planning process:

Excerpt from the Current Job Description of the ACWP Basin Facilitators

1. Conduct stakeholder/public outreach concerning watershed water quality needs based on Alabama’s Section 303(d) list;
2. Coordinate efforts to identify sources of existing data (including water quality, biology, and habitat, as available) for review, ongoing monitoring efforts, and future monitoring data needs;
3. Promote the sharing of data with stakeholders and with ADEM through the Steering Committee, and report data findings as appropriate;
4. Work with Steering Committee to solicit, locate, promote/recommend corrective action projects directly through others;
5. Coordinate efforts of the Steering Committee to obtain funding and prioritize the use of available funds for corrective action projects within the basin as necessary;
6. Assist or facilitate corrective actions completion as necessary;
7. Report progress quarterly to ADEM and the Alabama Clean Water Partnership (ACWP) State Facilitator utilizing a generic format provided by the Department;
8. Assist with development of Watershed-Based Plans and TMDL implementation where applicable;
9. Promote and support the Nonpoint Source Education of Municipal Officials (NEMO) activities;
10. Track and report volunteer and in-kind contributions for monitoring of total project value;

APPCO plays a major role in basin management planning for the Alabama and Tombigbee Rivers. In its early years, the efforts of this group sustained the AlaTom Steering Committee. These early efforts succeeded in developing several sub-basin groups. For example, the first Upper Tombigbee Sub-basin Group was held July 1, 2003 in Aliceville, Alabama - the first sub-basin group meeting in the Alabama and Tombigbee River Basin. Other exploratory efforts were pursued to generate interest in the formation of groups for each sub-basin to various levels of success.

At the onset of the Alabama – Tombigbee Basin Management Planning Process in the fall of 2003, APPCO, Kleinschmidt Associates and the AlaTom Steering Committee agreed to implement a collaborative stakeholder process that built off current efforts. This process was strategically designed so that the basin management planning process would be used as a beacon to attract participants and local sponsors to form sub-basin groups. The hope was to “jump start” the public participation program for the Alabama and Tombigbee River Basins plans and to draw people to the statewide ACWP program. Based on APPCO’s previous efforts to identify potential participants and to develop interest in stakeholder groups, it was decided that organizational efforts should focus on the following sub-basins/counties and combine ongoing efforts where practical:

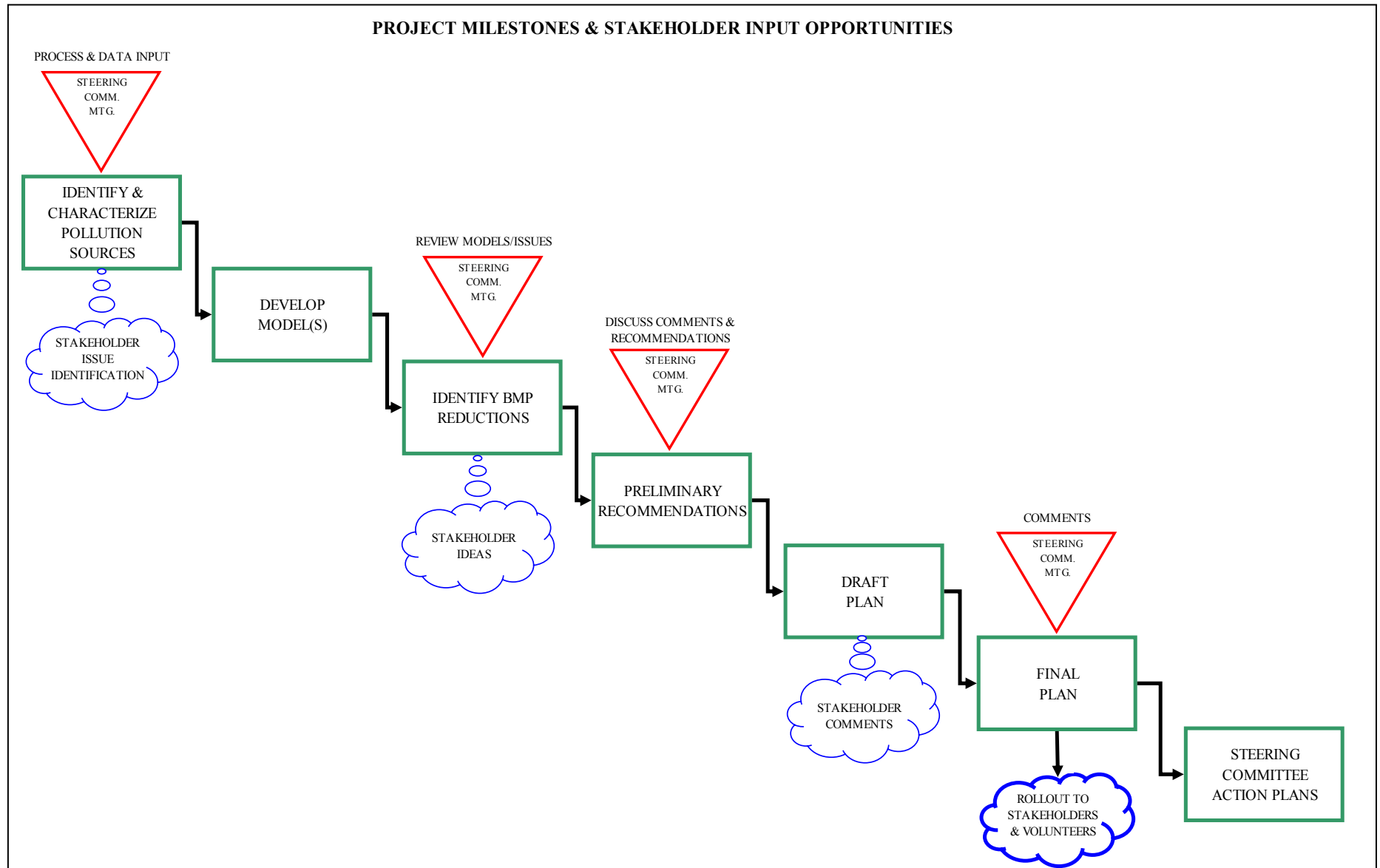
- Upper Tombigbee
- Lower Tombigbee/Lower Alabama
- Upper Alabama/Catoma Creek
- Middle Alabama
- Middle Tombigbee

An illustration of the stakeholder input process for the Alabama and Tombigbee Basin Management Plans is provided as Figure 1 below. At defined stages in the plan development timeline (blue-colored symbols), stakeholders are given the opportunity to participate in the basin management planning process. Particular attention and energy is focused on stakeholder comments related to known water quality issues (i.e. water quality issues as defined by the State's 305(b), 303(d) and/or TMDL Process) and any other water quality concerns or issues they have. In terms of scale, basin management issues are discussed from a basin level down to the associated watersheds and sub-watersheds, where applicable.

APPCO and Kleinschmidt Associates began a "pilot" program for the sub-basin stakeholder outreach process in January 2004. Three meetings were arranged by APPCO to introduce stakeholders and the AlaTom Steering Committee to the basin planning process and to solicit input about current water quality issues in each basin. The stakeholder participation program began with an 'Upper Tombigbee Stakeholder Group' meeting on Tuesday, January 27, 2004 in Carrollton, Alabama.¹⁰ The AlaTom Steering Committee met on the following day and discussed basin management issues. And, the 'Lower Alabama/Lower Tombigbee Stakeholder Group' met on Thursday, January 29, 2004 in Grove Hill, AL. Shortly after these meetings, a special Alabama-Tombigbee Stakeholder Group meeting was organized and held during WaterQuest 2004 in Birmingham on February 10, 2004.

¹⁰ Due to inclement weather, Kleinschmidt Associates was not able to attend the meeting in Carrollton and Allison Newell Jenkins, ACWP Executive Director, was kind enough to fill in for him.

Figure 2.3. Stakeholder Input Opportunities for the Basin Management Plans



In March of 2004, the first phase of the stakeholder participation program was launched. During the week of March 15, 2004, four sub-basin stakeholder meetings were organized by the Basin Facilitator and her sponsoring organization, the Alabama Pulp and Paper Council. The meetings' agendas included an introductory and educational component to familiarize participants to the state ACWP and the basin management planning process. The remainder of the agenda included a facilitated discussion of water quality issues in order to gain direct input from participants about local watershed concerns.

<i>Alabama Tombigbee River Sub-basin Stakeholder Groups Meetings, March 16 – 18, 2004</i>
Upper Tombigbee Tuesday, March 16, 2004 at 6:00 p.m., Cooperative Extension Bldg in Carrollton, AL
Upper Alabama – Catoma Creek Watershed Wednesday, March 17, 2004 at 12:00 p.m. at the Montgomery County, Department of Health Auditorium
Middle Tombigbee Thursday, March 18, 2004 at 12:00 p.m., UWA On-Site Wastewater Demonstration Training Center, Livingston, AL
Lower Alabama/Lower Tombigbee Thursday, March 18, 2004 at 6:00 p.m., ALFA Building, Grove Hill, AL

Stakeholder input is the cornerstone to successful basin management plans for the Alabama and Tombigbee River Basins. Participants at the sub-basin meetings received presentations on current water quality issues in their basin, sub-basin and watersheds and they were asked to respond with questions and engage in facilitated discussions. In some instances, “around the room” discussions were staged so that everyone in the audience was given an opportunity to introduce themselves, speak about where they live, their interest in participating in the group and most importantly, what concerns they had about the rivers and tributaries of their community. Participants were encouraged to elaborate on problems they perceived in the watershed and suggest possible remedies for these issues. These sessions allowed for direct input from watershed stakeholders that wished to be a part of the basin management planning process. This stakeholder input is presented in Section 6.2 of this plan.

2.3.1 Catoma Watershed Advisory Committee

The Catoma Creek is a tributary of the Alabama River that runs northwesterly from its headwaters in southern Montgomery County to its confluence with the Alabama River approximately ten miles west of the City of Montgomery. ADEM categorizes the Catoma Creek with a ‘Fish and Wildlife’ classification meaning that the water quality in this creek should support aquatic fish and wildlife. Approximately 23 miles of the lower Catoma Creek from Ramer Creek to the confluence with the Alabama River have been included on the State’s *303d List of Impaired Waters* for excessive organic enrichment and low dissolved oxygen since 1996. More recently, the Catoma Creek was also “listed” because of the presence of high levels of pathogenic bacteria in water quality samples.

Great attention to the Catoma Creek and its water quality emerged in the late 1980s and has continued to this day. Sanitary sewer overflows (SSOs) from the Catoma Water Pollution Control Plant (WPCP), resulting from rain events, were suspected to be negatively impacting the aquatic ecology of the creek and fish kills. Through an Administrative Order, ADEM directed the Water Works and Sanitary Sewer Board of the City of Montgomery to assess the water quality issues associated with the WPCP and other possible pollution sources in the Catoma Creek Watershed. As a result, the *Catoma Creek Watershed Management Study* was originated

The *Catoma Creek Watershed Management Study* concluded that the source of the creek’s water quality problems were not the SSOs associated with the WPCP. The study found that nonpoint source pollution and storm water discharges were the primary causes of water quality impairments to the Catoma Creek in wet and dry weather. The watershed study led to the development of the *Catoma Creek Watershed Management Plan* that took an integrated and holistic approach to solving the water quality problems with the creek. In October 1998, the *Plan* was completed by the consulting firm CH2M Hill for the Water Works and Sanitary Sewer Board.

The Catoma Creek plan established management goals and strategies to restore and protect the water quality of the Catoma Creek. Much like this basin management plan, it was developed with input from stakeholders representing various interests that

worked together to identify problems, define objectives, develop management or control alternatives, select the best alternatives, implement the plan, and monitor the performance of implementation steps. The development of the plan relied on three committees and their collective efforts: Steering Committee, Technical Committee, and Education/Outreach Committee. Since the completion of the Plan, a standing committee called the Catoma Watershed Advisory Committee has been working under the auspices of the Board and CH2 Mhill to implement the watershed management plan.

It is widely recognized that the efforts to create and implement the *Catoma Creek Watershed Management Plan* represent a good working model for watershed management in Alabama. In fact, the activities in the Catoma Watershed provide evidence to the importance of working on the sub-watershed scale, which is a key recommendation of this plan. Therefore, this basin management planning process linked the fledging Upper Alabama Stakeholders Group with the Catoma Watershed Advisory Committee in order to bring new stakeholders into a setting where some momentum existed.

The CCWP meets on a quarterly basis in Montgomery. During the development of this basin management plan, stakeholders from the Upper Alabama Sub-basin Stakeholders Group were invited to attend and participate in discussions regarding the Catoma Creek and the Alabama River. Although the Catoma Creek Plan exists as a separate document, its objectives run parallel with the management objectives of this basin management plan. Therefore, this basin management plan recommends working with the Catoma Watershed stakeholders to further their goals as well as those for the sub-basin as whole.