







Alabama-Coosa-Tallapoosa River Basin
Water Control Manual Update
and
Environmental Impact Statement

**SCOPING REPORT** 





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Phrase	Acronym			
Alabama Power Company	APC			
Alabama-Coosa-Tallapoosa	ACT			
Apalachicola-Chattahoochee-Flint	ACF			
Cobb County-Marietta Water Authority	CCMWA			
Comprehensive Wildlife Conservation Strategy	CWCS			
Cubic Feet per Second	cfs			
Draft Environmental Impact Statement	DEIS			
Environmental Impact Statement	EIS			
Environmental Protection Agency Region 4	USEPA			
Federal Energy Regulatory Commission	FERC			
Hydrologic Engineering Center	HEC			
Lake Martin Resource Association	LMRA			
National Environmental Policy Act	NEPA			
National Oceanic and Atmospheric Administration- National Marine Fisheries Service	NOAA			

List of Acronyms				
Phrase	Acronym			
Natural Resources Conservation Service	NRCS			
Riverine Community Habitat Assessment and Restoration Concept	RCHARC			
Southeastern Power Administration	SEPA			
State of Alabama Office of Water Resources	Alabama OWR			
Subject Matter Experts	SME			
Threatened and Endangered Species	T&E			
U.S. Army Corps of Engineers	Corps			
US Fish and Wildlife Service	USFWS			
Water Control Manual	WCM			
Water Resources Development Act	WRDA			

## Introduction

The Alabama-Coosa-Tallapoosa (ACT) River Basin (**Figure ES-1**) provides multipurpose water resources for millions of residents, thousands of businesses and natural resources. The basin extends from its northern-most point just north of the Georgia-Tennessee border, extending into north central Georgia, crossing the Alabama-Georgia state-line into north Alabama, continuing across central and south Alabama before terminating in Mobile Bay.



Figure ES-1. ACT River Basin

Over the past fifty years, in an effort to better manage the water resources of the basin, a series of federal and private reservoir projects were constructed, operated and maintained for flood damage reduction, navigation, irrigation, hydropower, water supply, water quality, recreation, and fish and wildlife. Consequently, to achieve these multipurpose benefits and long-term sustainability, the projects must operate as a hydrologically integrated system. Starting around 1951, Water Control Manuals (WCM's) were developed for the projects to assist federal water managers in the operation of individual

and multiple interdependent federal reservoirs. These manuals provided technical, historical, hydrological, geographic, demographic, policy and other information that helped guide the proper management of reservoirs during times of droughts, floods, and normal flow conditions. Nevertheless, with the passing of time and changes in the basin hydrology and water demands, along with climatological changes, it has become necessary to update the manuals to reflect existing conditions for better management of the water resources.

In October 2007, the Secretary of the Army directed the Corps of Engineers (Corps) to update the Water Control Manual for the Alabama-Coosa-Tallapoosa (ACT) River Basin. An updated WCM that includes water control plans for all the Corps projects in the ACT River Basin is required by Engineer Regulation 1110-2-240.

Consequently, in accordance with Engineer Regulation 1110-2-240 and the requirements of the National Environmental Policy Act (NEPA), the Corps held one Federal interagency scoping meeting and four public scoping meetings to solicit input/feedback from the interested public and federal/state agencies regarding the proposed update to the WCM and associated EIS.

## **Federal Interagency Scoping Meeting**

September 11<sup>th</sup>, 2008: Mobile District Office

### **Public Scoping Meetings**

- September 15<sup>th</sup>, 2008: Kennesaw, Georgia
   September 16<sup>th</sup>, 2008: Rome, Georgia
   September 17<sup>th</sup>, 2008: Gadsden, Alabama

- September 18<sup>th</sup>, 2008: Montgomery, Alabama

The scoping effort was intended to:

- Encourage interested parties to participate in the WCM Update project design and scope;
- Provide early public access to information about program background, purpose, progress updates, and Corps intentions;
- Solicit information and comments from interested parties; and
- Facilitate effective communication between the Corps and interested parties.

The overall scoping process also consisted of:

- Publishing and announcing public scoping meetings in the Federal Register.
- Distributing a newsletter and a public notice announcing public scoping meetings and locations to newspapers; Federal, State, and local agencies and officials; stakeholders; and other interested parties.
- Preparing and launching a website that described the NEPA process and all the public involvement activities planned in updating the WCM and preparing the EIS

and could serve as a tool to collect public comments and update the project mailing list.

- Distributing press releases to media outlets.
- Sending agency scoping and tribal consultation letters by email.
- Conducting ResSim Workshop.
- Publishing the final scoping report online at: http://www.act-wcm.com

Comments obtained during the scoping efforts were summarized into eleven key areas of concern.

- 1. Water Resources
- 2. Economic Resources
- 3. Ecological Resources
- 4. Recreation
- 5. Other
- 6. NEPA Process
- 7. Baseline Conditions
- 8. Public Communications/Newsletters
- 9. Scoping Meetings
- 10. Cultural Resources
- 11. Agriculture

A total of 117 responders submitted comments. The overall outcome of the scoping efforts suggests that the major area of concern centered on water resources (quality/quantity) and the overall management of the reservoir system followed by economic resources. **Figure ES-2** depicts the percentage of comments by categories.

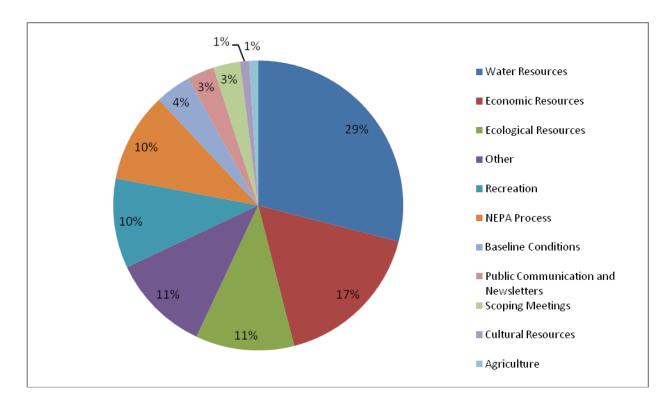


Figure ES-2. Percentage of Comments Received by Categories

As this process continues, the public can continually obtain information on the status and progress of the Water Control Manual Update and the EIS by visiting the Water Control Manual website: <a href="https://www.act-wcm.com">www.act-wcm.com</a>.

Questions or comments specifically related to the EIS should be directed to Mr. Chuck Sumner, Mobile District, Environment and Resources Branch, Planning and Environmental Division, U.S. Army Corps of Engineers, Post Office Box 2288, Mobile, AL 36628-001; telephone (251) 694-3857; fax (251) 694-3815; or email lewis.c.sumner@usace.army.mil.

The scoping report is posted at **www.act-wcm.com** and can be downloaded with or without the appendices.

# 1.1. Project Introduction

Purpose: The purpose of the proposed action is to update the ACT WCM and appendices to include current project operations under the existing congressional authorizations taking into account changes in basin hydrology and consumptive demands due to years of growth and development; new/rehabilitated structural features; and environmental issues and to develop the required National Environmental Policy Act (NEPA) documentation necessary to make a final decision.

Need: The current approved WCM was completed in 1951 and does not reflect current conditions within the basin. An updated Master WCM water control plan and basin wide drought contingency plan is required by regulation and is needed to accomplish the specific congressionally authorized and general statutory project purposes in the basin while balancing private, community, social, and economic needs and sound environmental stewardship.

The Alabama-Coosa-Tallapoosa (ACT) River Basin (**Figure 1**) provides multi-purpose water resources for millions of residents, thousands of businesses and natural resources. The basin extends from its northern-most point just north of the Georgia-Tennessee border, extending into north central Georgia, crossing the Alabama-Georgia state-line into north Alabama, continuing across central and south Alabama before terminating in

Mobile Bay.

Over the past fifty years, in an effort to better manage the water resources of the basin, a series of federal and reservoir private projects constructed, operated and maintained for flood damage reduction, navigation, irrigation, hydropower, water supply, water quality, recreation, and fish and wildlife. Consequently, to achieve these multipurpose benefits, the projects must operate as a hydrologically integrated system in order to ensure sustainability. long-term Starting around 1951, Water Control Manuals (WCM's) were developed for the system to assist federal water the operation managers in individual and multiple interdependent federal reservoirs. These manuals



Figure 1. ACT River Basin

provided technical, historical, hydrological, geographic, demographic, policy and other information that helped guide the proper management of reservoirs during times of droughts, floods, and normal flow conditions.

An individual manual for each of 9 projects is prepared as an appendix to the master manual. Allatoona was the only project constructed at the time of the original 1951 Master WCM. The additional 8 individual project WCMs were prepared after their construction. Four of those project manuals were updated from 1990-1999. The current project manuals are listed below.

		Master Manual
Project Name	Manual Date	Appendix
Allatoona Dam	1993	Α
Weiss Dam	October 1965	В
H. Neely Henry Dam	January 1979	C
Logan Martin Dam	January 1968	D
Millers Ferry Lock and Dam	December 1990	E
Claiborne Lock and Dam	October 1993	F
Robert F. Henry Lock and Dam	March 1999	G
Carters Dam	July 1979	Н
Harris Dam	December 2003	I

<sup>\*</sup>NOTE: Blue text indicates Corps of Engineers Projects.

From 1992 through 1997, the States of Alabama, Georgia, Florida, and the Mobile District U.S. Army Corps of Engineers (Corps) worked jointly under the Comprehensive Study to "determine the capabilities of the Water Resources of the basin, to describe the water resource demands of the basin, and to evaluate alternatives which utilize the Water Resources to benefit all user groups in the basin" (Corps, 1998). The goal of the Comprehensive Study was to "develop relevant technical information, strategies, and plans, and recommend a formal mechanism for the long-term, basin-wide management and use of water resources to meet the environmental, public health, and economic needs of the basin".

In 1997 Compacts between the States of Alabama and Georgia were signed with a goal of developing an allocation formula for the basin. This compact expired in 2004 without an agreement being reached.

After unsuccessful efforts among the states to reach consensus, in October 2007 the Secretary of Army directed USACE to update the Master Control Manual for the

Alabama-Coosa-Tallapoosa (ACT) River Basin in Alabama and Georgia. In September 2008, the Corps began holding public scoping meetings in Georgia and Alabama to receive comments on its proposed plans for updating the ACT Basin WCM's. This report describes the activities conducted during Project Scoping for the proposed ACT River Basin WCM Update.

This report outlines the following:

- Issues that were identified as important to federal and state agencies and the general public
- Pertinent information including the project's background and history of the ACT River Basin
- Significant resources identified during federal and state agency and public consultation
- Comment analysis
- Evaluation methodologies, and;
- Conclusions

All comments received will help to steer the direction of the WCM update process and identify the key issues and potential impacts of most concern to be addressed in the Environmental Impact Statement (EIS).

# 1.2. Purpose of Scoping

The purpose of the scoping procedure under the NEPA is to assure the appropriate level of participation of State, Federal, Tribal, and local agencies and stakeholders in determining project scope and approach. This participation is intended to help identify resource and process issues that are of critical importance to agencies and the public, as well as those issues that are not critical, and to provide input to determine the scope of the analysis to be performed. Central to the scoping process is to clearly identify potential significant environmental, economic and sociological resources in the ACT basin and to determine both the importance and the value of those resources to society and the environment that may be potentially affected by undertaken actions. The following are descriptions of the three bases for significance of resources identified in the basin and defined in the U.S. Army Corps of Engineers' water resources project planning guidance (ER 1105-2-100, 2000):

- Institutional Significance of an environmental resource is acknowledged in the laws, adopted plans, and other policy statements of public agencies, tribes, or private groups
- Public Significance of resource is recognized by the general public or segment of the public

 Technical – Significance of an environmental resource is based on scientific or technical knowledge or judgment of critical resource characteristics.

This scoping process is crucial to the Corps' planning guidance step one "Identifying Problems and Opportunities" (Corps, January 2004). Specific steps taken by the Corps to fully achieve the goals of the Scoping Process for this project are described in detail in Section 2 of this document, covering the Corps' requirements for public involvement under NEPA (40 CFR Parts 1500-1508), as well as the Corps' public involvement requirements for updating or revising water control plans under ER 1110-2-240 Water Control Management.

# 1.3. Background and Setting

## 1.3.1 PHYSICAL CONDITIONS

The ACT basin drains approximately 22,820 square miles in parts of southeastern Tennessee, northwest Georgia, and a diagonal area across Alabama from the northeast to the southwest corner of the State. The major rivers of the ACT basin are the Alabama, Coosa, and Tallapoosa Rivers. About 76 percent of the ACT basin lies in Alabama; the remaining 23 percent lies in Georgia, with a very small portion in southeast Tennessee. The basin extends approximately 320 miles from the Blue Ridge Mountains to the Gulf of Mexico and has an average width of approximately 75 miles. The basin covers 32 counties in Alabama, 18 counties in Georgia, and 2 counties in Tennessee.

The ACT basin is a dynamic hydrologic system containing interactions between aquifers, streams, reservoirs, floodplains, estuaries, and adjacent river basins. Water resources in the ACT basin have been managed to serve a variety of purposes, including navigation, hydroelectric power, flood damage reduction, water supply, water quality, and recreation. These water resources also provide important habitat for fish and wildlife. There are 18 dams in the basin (6 Federal and 12 non-Federal projects) that have altered the natural streamflow. The interrelationship between dam operations and downstream river flows has resulted in a highly regulated system over much of the basin, with the exception of the Cahaba River, which remains naturally free-flowing.

#### 1.3.2 WATER RESOURCES

Water resources in the ACT basin include both surface water (carried in rivers, lakes, and reservoirs) and groundwater sources. There is significant interaction in the basin between the surface water and groundwater with groundwater providing substantial base flow for some streams. Surface water hydrology in the basin is also greatly influenced by various management activities among the 18 reservoirs distributed up and down the basin. These reservoirs attenuate high river flows during wet periods and augment low river flows during dry periods. The Coosa and the Tallapoosa Rivers join to form the Alabama River

about two-thirds of the way downstream in the basin. Downstream of the Claiborne Lock and Dam, the Alabama River joins the Tombigbee River (draining 20,200 square miles of land) and forms the Mobile River, which subsequently flows into the Gulf of Mexico at Mobile Bay.

#### 1.3.2 CORPS AND NON-CORPS PROJECTS

A total of 18 dams, can be found in the ACT basin (Corps, 1998). Six projects are owned by the Corps and the remaining 12 are privately owned. The Corps is responsible for flood damage reduction at Weiss, H. Neely Henry, Logan Martin Dam, and Harris reservoirs. The Corps and Non-Corps projects are listed in Table 1-1.

There are two dams on the Coosawattee River: Carters Dam and Carters Reregulation Dam, a peaking hydroelectric facility. The Oostanaula River flows south for approximately 47 miles where it joins the Etowah River and forms the Coosa River at Rome, Georgia. There is one dam on the Etowah River – Allatoona Dam, about 48 miles above Rome near Cartersville, Georgia. The Coosa River flows 286 miles from Rome, Georgia, to north of Montgomery, Alabama, where it joins the Tallapoosa River to form the Alabama River. Seven Alabama Power Company (APC) dams form continuous impoundments over nearly the entire length of the Coosa River, with each dam discharging to the upper end of the next downstrem reservoir. The dams include: Weiss, H. Neely Henry, Logan Martin, Lay, Mitchell, Jordan, and Bouldin. The upper three APC projects operate as peaking facilities, with releases occurring several hours each weekday and with no releases on the weekends. The lower four projects generally operate as run-of-river projects for power production and to maintain stable flows from Jordan Dam over the weekends when the upstream peaking projects do not operate. Because the series of reservoirs provide continuous inundation from one dam to the next, the effects of the peaking operation are tempered and attenuated.

The Tallapoosa River begins in northwest Georgia at an elevation of 1,145 feet. The river flows 235 miles into Alabama to join the Coosa River near Montgomery. APC has constructed four dams across the Tallapoosa River. The upper two projects, Harris and Martin, are peaking projects that generate several hours on weekdays and normally do not generate on weekends. The two downstream projects, Yates and Thurlow, operate as run-of-river facilities, slightly reregulating peak upstream releases and maintaining downstream minimum flows over the weekends when the upstream projects typically reduce discharges.

The Alabama River is formed by the confluence of the Coosa and Tallapoosa Rivers about 14 miles north of Montgomery, Alabama. The river channel varies in width from 400 to 600 feet with banks 10 feet high (Corps, 1998). The Corps has constructed three multi-purpose dams on the Alabama River. R.F. Henry, located about 30 miles above

Selma, and Millers Ferry, located 73 miles downstream from Selma; each has a navigation lock and a hydroelectric powerhouse. Claiborne, located 82 miles above the mouth only has a navigation lock, six spillway gates, and a fixed-crest spillway.

Basin/River/Project Name	Owner/ Year Completed	_	Reservoir Size (ac)	Total Reservoir Storage (ac-ft)	Conservation Storage <sup>b</sup> (ac-ft)	Total Capacity (MW)	Normal (Summer) Lake Elevation (ft)
			Coosa River B	asin			
Coosawattee River		875					
Carters Dam and Lake	Corps/1974	376	3,220	383,565	141,402	575°	1,074
Carters Reregulation Dam	Corps/1974	154	870	19,300	17,210	None	700
Etowah River	Corps/1949	1,860	11,860	670,050	284,582	80°	840
Allatoona Dam and Lake Coosa River	C01ps/1949	1,110 10,270	11,860	670,030	204,302	80	640
Weiss Dam and Lake	APCO/1961	5,273	30,200	305,815	199,838	98 <sup>d</sup>	564
H. Neely Henry Dam and Lake	APCO/1966	6,600	11,200	120,639	86,992	98 <sup>d</sup>	508
	APCO/1964	7,743	15,263	273,300	133,502	143 <sup>d</sup>	465
Logan Martin Dam and Lake	APCO/1914	9,087	12,000	262,306	51,991	143 164 <sup>d</sup>	396
Lay Dam and Lake Mitchell Dam and Lake	APCO/1914 APCO/1923	9,827	5,850	170,422	47,201	154 156 <sup>d</sup>	312
	•	•		235,780	19,062	116 <sup>d</sup>	252
Jordan Dam and Lake <sup>a</sup>	APCO/1928	10,165	6,807 6,807	,	19,062 NA		252 252
Bouldin Dam and Lake <sup>a</sup>	APCO/1967	10,165 <b>Ta</b>	Ilapoosa Rive	235,780 r <b>Basin</b>	NA	226 <sup>d</sup>	252
Tallapoosa River		4,660					
Harris Dam and Lake	APCO/1983	1,453	10,661	425,503	141,401	126 <sup>d</sup>	793
Martin Dam and Lake	APCO/1926	3,000	40,000	1,623,000	638,912	150 <sup>d</sup>	490
Yates Dam and Lake	APCO/1928	3,250	2,000	53,770	5,002	33 <sup>d</sup>	344
Thurlow Dam and Lake	APCO/1930	3,300	574	18,461	NA	54 <sup>d</sup>	289
		,	labama River				
Alabama River		22,800	ilaballia itivei	Dasiii			
Robert F. Henry Lock and Dam R.E. "Bob" Woodruff Lake	Corps/1972	16,300	12,510	234,200	12,110	68 <sup>d</sup>	125
Millers Ferry Lock and Dam William "Bill" Dannelly	Corps/1969	20,700	18,500	331,800	46,704	75 <sup>d</sup>	80
Claiborne Lock and Dam and Lake  Cahaba River	Corps/1969	21,473 1,890	5,930	96,360	NA	None	35
Purdy Dam and Lake	BWWB/NA	43	990	24,000	NA	None	550
<sup>a</sup> Share a common reservoir							
<sup>b</sup> Top of conservation pool (maximum	)-top of inactive pool						
<sup>c</sup> Overload capacity: represents maxin			its				
<sup>d</sup> Nameplate capacity: represents full-	load continuous ratin	g of generators					
ac Acre		ft Feet					
ac-ft Acre feet		kW Kilowatts					
APCO Alabama Power Company	MW Megawat NA Not applic	ts					

## 2.1. SCOPING PROCESS SUMMARY

The objective of the scoping is to determine the scope of issues to be addressed and to identify the significant issues to be analyzed in depth related to the proposed action (40 CFR 1501.7). This process also serves to deemphasize insignificant issues, narrowing the scope of the EIS process accordingly (40 CFR1500.4(g)). Scoping results in the identification by the proponent of the range of actions, alternatives, and impacts to be considered in the EIS (40 CFR 1508.25).

Furthermore the scoping process is intended to:

- Encourage interested parties to participate in the WCM Update project design and scope;
- Provide early public access to information about program background, purpose, progress updates, and Corps intentions;
- Solicit information and comments from interested parties; and
- Facilitate effective communication between the Corps and interested parties.

The overall scoping process consisted of the following elements:

- Publishing and announcing public scoping meetings in the Federal Register
- Distributing a newsletter and a public notice announcing public scoping meetings and locations to newspapers; Federal, state, and local agencies and officials; stakeholders; and other interested parties
- Preparing and launching a website that described the NEPA process and all the public involvement activities planned in preparing the EIS and could serve as a tool to collect public comments and update the project mailing list
- Distributing a press release to media outlets
- Sending agency scoping and tribal consultation letters by email
- Holding an interagency scoping meeting with Federal agencies via webcast to
  provide background on the proposed action and obtain their agencies issues or
  concerns to be considered in the EIS and WCM update as well as any data sources
  and analytical tools they might recommend to assist in evaluating the alternatives
  and analyzing potential impacts
- Holding four public scoping meetings to inform the public about the proposed action and to solicit oral and written comments on the issues that should be addressed in the EIS and the WCM update
- Reviewing and evaluating oral and written comments received during the open comment period
- ResSim Workshop at Jim Woodruff Lock and Dam

- Native American Consultation
- Publishing the scoping report online at: <a href="http://www.act-wcm.com">http://www.act-wcm.com</a>
- Distributing a newsletter announcing publication of the scoping report to Federal, state, and local agencies and officials; stakeholders; and other interested parties

## 2.2. PUBLIC NOTICE

#### 2.2.1 Notice of Intent

The "Notice of Intent to Prepare an Environmental Impact Statement" was prepared by the Corps and was published in the Federal Register Volume 72, No. 217, on November 9, 2007 as "Intent to Prepare Draft Environmental Impact Statement for Revised Water Control Manuals for the Alabama-Coosa-Tallapoosa River Basins". A supplemental notice was published in the Federal Register Volume 73, No. 164, on August 22, 2008 as "Public Scoping Meetings for Update of the Water Control Manual for the Alabama-Coosa-Tallapoosa River Basin in Alabama and Georgia". The two Federal Register Notices are included in Appendix A.

#### 2.2.2 Written Notification

On August 15<sup>th</sup>, 2008, over 4,500 letters were mailed to state and Federal agencies, interest groups, and the general public providing notification of the proposed ACT WCM Update (Appendix B). The notification encouraged agencies, officials, and interest groups to attend the meetings to offer input relative to significant issues important to their particular group.

The mailing list used for distribution was based upon previous efforts by the Corps in the ACT Basin and updated to reflect changes in the basin since the last public coordination efforts in about 2002.

#### 2.2.3 Public Announcements

A press release was also distributed by the Corps Public Affairs Office to numerous newspaper, television and radio stations within the ACT River Basin (Tables 2-1 and 2-2). Notification of meetings, locations, and a description of the proposed action were published through the purchase of advertisement space in the local newspapers of the towns where the meetings were held. A copy of the press release used is included in Appendix C. Below is a list of the newspapers in which advertisement space was purchased to announce the meeting locations.

Table 2-1: Newspapers that Received Press Releases				
Newspaper Name	Location (City and State)			
AccessNorthGA	Gainesville, GA			
Alexander City Outlook	Alexander City, AL			
Appen Newspapers	Alpharetta, GA			
Athens Banner-Herald	Athens, GA			
Atlanta Business Chronicle	Atlanta, GA			
Atlanta Daily World	Atlanta, GA			
Atlanta Journal Constitution	Atlanta, GA			
Bartow Neighbor	Cartersville, GA			
Birmingham News	Birmingham, AL			
Calhoun Times	Calhoun, GA			
Cartersville Daily Tribune	Cartersville, GA			
ETC North Georgia Now	Calhoun, GA			
Forsyth News	Forsyth, GA			
Gadsden Times	Gadsden, AL			
Gainesville Times	Gainesville, GA			
Gulf County Breeze	Gulf County, FL			
Herald News	Miami, FL			
Jackson County Floridian	Marianna, FL			
Lakeside on Allatoona	Cartersville, GA			
Macon Telegraph	Macon, GA			
Marietta Daily Journal	Marietta, GA			
Montgomery Advertiser	Montgomery, AL			
NeighborNewspapers.com	Marietta, GA			
NW Alabama Daily Times	Florence, AL			
Cartersville Newspaper Inc	Cartersville, GA			
Cedartown Standard	Cedartown, GA			
Chatsworth Times	Chatsworth, GA			
Cherokee Post (The Post)	Centre, AL			
Cherokee Tribune	Canton, GA			
Cherokee Tribune and Neighbor	Marietta, GA			
Columbus Ledger Enquirer	Columbus, GA			
Daily Citizen News	Dalton, GA			
Daily Home	Talladega, AL			
Dalton Daily Citizen	Dalton, GA			
Donaldsonville News	Donaldsonville, LA			
Douglas Neighbor	Douglasville, GA			
Early County News	Blakely, GA			
Mobile Register	Mobile, AL			
Pensacola News Journal	Pensacola, FL			
Rockmart Journal	Rockmart, GA			

Table 2-1: Newspapers that Received Press Releases		
Newspaper Name	Location (City, State)	
Rome News Tribune	Rome, GA	
The Calhoun Times	Calhoun, GA	
The County Record	Callahan, FL	
The News Observer	Blue Ride, GA	
The Post Searchlight	Bainbridge, GA	
Times Courier	Ellijay, GA	
Treasure Coast Florida News	Treasure Coast, FL	
Valley Times	Lanett, AL	
Walker County Messenger	Lafayette, GA	
Associated Press-Bluestein	Not Applicable	
Associated Press-General Account	Not Applicable	
Associated Press-Newby	Not Applicable	
Greenwire	Not Applicable	

Table 2-2: Radio and Television Stations				
Station Name	<b>Location (City and State)</b>			
WAAY ABC 31 Huntsville	Huntsville, AL			
WAFF NBC 48 Huntsville	Huntsville, AL			
WALB NBC 10	Albany, GA			
WBHF 1450 AM Cartersville	Cartersville, GA			
WBMA ABC 33/40	Birmingham, AL			
WFSA NBC - Montgomery	Montgomery, AL			
WGCL CBS46	Atlanta, GA			
WGST News Radio Atlanta	Atlanta, GA			
WPMI NBC 15	Mobile, AL			
WRBL ABC 3 Columbus	Columbus, GA			
WRGA News Talk 1470 AM Rome	Rome, GA			
WSB ABC2	Atlanta, GA			
WTOC CBS 11	Savannah, GA			
WTOC CBS 11	Savannah, GA			
WTVC News Channel 9	Chattanooga, TN			
WTVM ABC 9	Columbus, GA			
WTXL ABC 27	Tallahassee, FL			
WALA FOX 10	Mobile, AL			
WEAR ABC3	Pensacola, FL			
WKRG CBS5	Pensacola, FL			
WXIA-TV	Atlanta, GA			

#### 2.2.4 Website

The Corps developed, implemented, and maintains a project website, http://www.act-wcm.com that can be easily accessed by the public to gather and review ACT WCM project information. The website was launched on September 11, 2008. The website contains information such as examples of water control manuals, Corps project information, public scoping dates and location, general NEPA information, and other Corps related items. The project website also serves as a means for the public to submit comments and register or update their contact information.

# 2.3 Interagency Scoping Meeting

The Corps sent written notification to Federal agencies requesting their participation in the interagency scoping meeting is presented in Appendix D. Subsequent to the letter, the Federal agencies were also contacted by telephone, fax, or email to further extend the invitation to participate in the interagency scoping meeting via webcast or in-person. The interagency scoping meeting was held in Mobile, Alabama at the Corps' office on September 11, 2008. The majority of participating Federal agencies opted for the webcast. There were a total of 11 participants via webcast and 1 Federal agency representative present in-person.

Federal agencies that participated in the interagency scoping meeting included:

- US Fish and Wildlife (USFWS)
- Southeastern Power Administration (SEPA)
- Environmental Protection Agency (EPA) Region 4
- Natural Resources Conservation Service (NRCS)
- Federal Energy Regulatory Commission (FERC)
- National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service

The following topics were presented:

- Project Background
  - Water Control Manual
  - NEPA Process
- Discussion of Tools and Methodology
  - Hydrology and Hydraulics
  - o Resource Areas
- Project Schedule
- Interagency Coordination
  - Agency Point(s) of Contact (POC)
  - o Data Sharing
  - Technology Sharing
  - Workgroups

A list of interagency invitees, sample interagency letter, meeting presentation and meeting transcript is included in Appendix D.

#### 2.4 RESSIM WORKSHOP

In the interest of transparency and cooperation, the Mobile District and Hydrologic Engineering Center (HEC) hosted a Stakeholder's Workshop to share the new tools and data with all stakeholders groups involved with water management issues in the basin. The workshop took place at Jim Woodruff Lock & Dam from 30 September – 2 October 2008, and focused entirely on technical topics. A total of twenty-eight modelers attended the workshop representing three Federal agencies, three state agencies, one university, and five private consultants representing the stakeholders. The ResSim workshop invitation and agenda is presented in Appendix E.

The session proved very successful regarding it objectives:

- Introduce the participants to the HEC-ResSim software.
- Initiate technology transfer by providing the participants with a copy of the software and ACT/ACF Models; walk the participants through the model; and answer questions.
- Foster relationships by continuing longstanding technical working relationships with stakeholders.

Mobile District and HEC continue to refine the HEC-ResSim models of the ACT system, with an informed stakeholder group.

#### 2.5 GOVERNMENT TO GOVERNMENT CONSULTATION

Government-to-government tribal consultation letters were sent electronically on October 1, 2008 and on October 15, 2008 the letters were sent by US mail to 26 Federally-recognized American Indian tribes in Georgia and Alabama (Appendix F). The consultation letters contained information regarding the update of the WCM. Information in the letter included the date and location of scheduled public meetings, as well as a request for their response to attend a government-to-government tribal consultation meeting.

A government-to-government consultation meeting was to be held outside Mobile, Alabama on November 13, 2008 to inform tribal leaders about actions the USACE is taking on both the ACT and Apalachicola-Chattahoochee-Flint (ACF) River basins to update WCM's. In response to the initial electronic mailing, seven tribes responded. Of these, a number of tribes had conflicts in their schedules. One response was received from Choctaw Nation of Oklahoma with interest in attending a meeting on November 13, 2008.

A final mailing was sent electronically as a followup with tribes to ensure that no other tribes were interested in attending government-to-government consultation at this time. Given the limited response, the Corps chose to coordinate with tribes through electronic mail at this time and referred them to resources available online to find out more about the current action. A meeting may be scheduled at a later date when tribal leaders would be able to attend. The Muscogee (Creek) Nation offered to host a meeting at a later date in Tulsa, Oklahoma. The Seminole Nation of Oklahoma and Augustine Asbury also expressed interest in attending a rescheduled meeting.

#### 2.6 PUBLIC SCOPING MEETINGS

The general public, local agencies, officials in towns and counties, and local interest groups within the ACT River Basin were notified of the public scoping meetings held from 6 p.m. until 8 p.m. during September 2008 in the towns of:

- September 15<sup>th</sup>, 2008: Kennesaw, Georgia
- September 16<sup>th</sup>, 2008: Rome, Georgia
- September 17<sup>th</sup>, 2008: Gadsden, Alabama
- September 18<sup>th</sup>, 2008: Montgomery, Alabama

An open house/informational style meeting approach was used at each location. This meeting style was intended to encourage one-on-one dialogue between the Corps and public scoping participants. Project materials were displayed at six stations for the participants to view and discuss:

- 1. Welcome/Instructions
- 2. Water Control Manual
- 3. Water Management
- 4. Evaluation Tools
- NEPA/EIS
- 6. Environmental Resources
- 7. Socio-Economics
- 8. Media
- 9. Commenting

Each participant was asked to sign in upon entering the room. Participants were then encouraged to visit any station having information of particular interest to them. At each station were Corps project information, general NEPA factsheets, and other Corps related items available for the participants to review. Large display informational signs and maps were placed throughout the venue for independent review by participants (Appendix G). Each station was accompanied by Corps personnel and/or Corps consultants. The personnel were subject matter experts (SME) of the stations to which they were assigned. Participants were able to ask questions and gather information from the SME. Project

factsheets and documents that were provided to participants are included in Appendix H. Photographs of the Scoping Meetings are included in Appendix I. A map depicting locations in which participants traveled from to attend the Public Scoping meetings is provided in Appendix J.

## 2.6.1 Written and Electronic Comments Received

Scoping meeting attendees were encouraged to fill out comment sheets, dictate their comments to the court reporter or enter them electronically via the website at comment station to express their concerns and interests with regard to the WCM Update. Participants were also encouraged to independently mail, fax, or enter comments electronically through the website by the October 20, 2008 comment deadline. Comments were received from government agencies, interest groups, and local citizens and are further discussed in Section 3 of this report.

Scoping continues throughout the preparation of an EIS. The Corps will accept and consider all comments regardless of when they are submitted. However, comments submitted after October 20, 2008, are not represented in this report.

# 3. Comment Analysis

### 3.1. COMMENT ANALYSIS

By October 20, 2008, comment submittal deadline, the Corps received comments from a total of 117 responders. Of the 117 responders, 17 responders dictated to the court reporter during the scoping meetings, 13 responders faxed, emailed, or sent via US Postal Service, 31 responders submitted during the scoping meetings by either completing a comment form or submitting other written documents and the remaining 56 responders submitted via the project website. A list was developed by the Corps prior to the scoping meetings and subsequently used on the ACT WCM comment form, both hardcopy and web version, as suggested ways for the responders to categorize their comments with the option of specifying their own under "Other". The areas of concern categories were:

- Agriculture
- Alternatives
- Baseline Conditions
- Cultural Resources
- Ecological Resources
- Navigation
- NEPA Process
- Newsletters
- Other
- Public Communication

- Economic Resources
- Fisheries
- Flood Damage Reduction
- Hydropower
- Impact Analysis
- Recreation
- Scoping Meetings
- Threatened and Endangered Species
- Water Quality
- Water Quantity/Supply

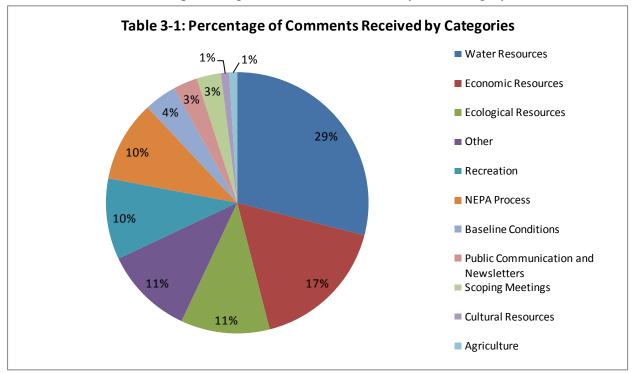
#### 3.2 REVIEW AND ORGANIZATION OF SCOPING COMMENTS

The comments were reviewed initially for their technical content, comprehensiveness and redundancy. The comments were then separated into areas of concern to focus on specific issues raised within each submittal. This section provides a summary of those comments and the significance of the issue based on the parties concerned with that particular effect or resource. Comments received were separated into the following significant resources and their respective subsection:

- Water Resources
  - Water Quality
  - Water Quantity/Supply
- Economic Resources
  - Flood Damage Reduction
  - Hydropower
  - Navigation
  - o Recreation
- Ecological Resources

- Fisheries
- Threatened & Endangered Species
- Other
  - Interbasin Transfer
  - Request for Postponement
  - o Return Flows
  - o Drought Management Plan
  - o Impact Mitigation
  - Modeling Tools
- NEPA Process
  - Scope of ACT WCM Update EIS
  - o Impact Analysis
  - Alternatives
  - o Baseline Conditions
  - o Public Communication
- Cultural Resources
- Agriculture

The chart below shows the percentage of comments received by each category.



#### 3.3 SUMMARIZED COMMENTS

The subsequent sections represent *combined paraphrased* summaries of comments received from all responders sorted by resources categories. Information derived from the scoping meeting comments is summarized in Table 3-2 found in Appendix K. The Scoping Comment Summary Table is organized by the 21 resource categories presented in Section 3.1. Text summarizing those comments is presented below by resource areas and sub-topics. The original comments are provided in Appendix L.

#### 3.3.1 Water Resources Issues

The Water Quantity/Water Supply and Water Quality categories received the most discussion of any of the resource categories. Water Quantity/Water Supply comments were directed at maintaining and protecting public water supplies and water supply storage allocations, particularly in Lake Allatoona. Maintaining higher lake level in the fall and winter was of particular interest for several of the reservoirs, but concerns were also expressed on ensuring adequate flood damage reduction if winter pool levels are increased. It was pointed out that whereas the basin has been fortunate this year to have had adequate rains; next year the basin may not be so lucky. The Corps needs to be proactive regarding any future deficit. Specific higher winter pool elevations were suggested for the Corps to consider. Maintaining higher lake levels was also stressed for numerous basin resources besides water supply in light of the recent extended drought in the basin. The Corps was urged to consider the far reaching effects of water management in the ACT basin as it impacts communities well beyond the boundaries of the basin itself. Water and power may still be supplied with a multitude of local entities but those entities become more tied together with each passing year. Restricting water allocations to a supplier at Lake Allatoona can affect water suppliers several counties away. This happens throughout the basin and the needs of all concerned should be weighed.

Water quality issues were also primarily linked to maintaining higher lake levels, particularly in Lake Allatoona. Most responders felt that Lake Allatoona level must be kept at a higher level in both the summer and winter to reduce the damage to the lake bank and to reduce the negative impacts due to the concentration of point and nonpoint source pollutants with decreased pool volume, particularly during the winter drawdown. Specifically, the Corps was cautioned to carefully factor into the WCM update sediment and nutrient loadings to Lake Allatoona from:

- urban activities,
- various industrial and municipal discharges,
- sudden fluctuations in elevation of water at the lake that worsen the lake shoreline erosion,
- sediment loading reductions on volume of storage, and
- faulty septic tank/ leach fields adjacent or on Corps properties at Lake Allatoona.

Others expressed concerns for the effects of reservoir operations on water quality, including: existing and potential effects to dissolved oxygen, temperature, pH, conductivity, and nutrient and organic material dynamics. As before, specific lake level targets were recommended in some of the responses. A Corps sponsored monitoring program was recommended addressing water quality in reservoirs and tail waters to detect, report, and mitigate possible water quality issues that might impact benthic and pelagic species.

Continual development in the ACT basin was highlighted as an issue of concern as it affects water quality. Specifically, the quality of the water in Lake Allatoona is of extreme concern and as development around the lake is proceeding at an alarming rate. It was also suggested that the Corps should work with county commissioners in Cobb County, Georgia to discuss the possible impacts to the lake and the quality of drinking water as they make zoning and growth decisions. The City of Rome expressed concern about sufficient flow in the Oostanaula and the Etowah Rivers to provide drinking water and to assimilate wastewater in the area if more water was retained in Carters Lake and/or Lake Allatoona. The quality of water coming down the Coosa to Gadsden is also a major concern as flows decrease. If low flow conditions persist, the water quality is going to continue to decline. Finally, last year during the drought, water quality at Neely Henry Lake was greatly diminished according to the Neely Henry Lake Association who is also fearful that water quality will further decline if diversion of water in Georgia continues to take place.

#### 3.3.2 Economic Resources Issues

Economic Resources categories were the second most selected and included Flood Damage Reduction, Hydropower, Navigation, and Recreation. The Recreation category was selected by almost 10 percent of the responders as an area of high concern. Typically considered as an economic resource to local communities and the states, the Recreation category comments were more often about quality of life issues rather than economic issues. Combined with Flood Damage Reduction, Hydropower, and Navigation, economic issues accounted for 17 percent of the total selected areas of interest.

Recreation. Specific Recreation Resource comments were split approximately 60 percent to 40 percent between the quality of life value of recreation resources compared to the economic value of the recreation resources. The comments received from Lake Allatoona recreational users suggest that the Corps should increase the winter pool level up to as high as 840 feet and should delay reductions in lake water levels from as early as the 4<sup>th</sup> of July to much later into the fall. They point out that in the southern states recreation should be supported well into the fall, whereas some years by Labor Day the lake is so low that it is dangerous to enjoy boating. They point out that if there is sufficient water for drinking and no chance of a flood, why can't Lake Allatoona be left higher, longer. On the economic side of the recreation issue, the economic value of the sport fishing industry in Alabama was estimated (2006) to exceed \$1.4 billion and provide over 14,600 jobs. The Corps needs to consider that the ability of these users groups to access both impounded and riverine waters is directly related to launching facilities being fully

functional at low water conditions. Additionally, water levels and connectivity in backwater areas of the ACT basin are important as nursery areas for rearing stages of many sport fish and important invertebrate species, and need to be maintained.

Realizing that one of Lake Allatoona's primary functions is for downstream flood damage reduction, there still needs to be a review of the historical data to allow for better management of the lake levels. Currently, the water level required for Allatoona seems substantially lower than what should be required for flood damage reduction. Higher water levels during off peak season would help the lake in the areas of pollution and recreation, while maintaining safe flood damage reduction based on historical data and lake level limits. Regarding the timing of releases, based on historical weather patterns, it is felt that the Corps now has data to determine the wet seasons and more accurately depict when the lake needs to be at its lowest point. If the rule curve could be adjusted to keep the water levels higher for later periods during the year, the benefits would accrue to both recreation and lake aesthetics (water quality), with the added benefit of drought remediation or protection. Finally, some flexibility should be built into the WCM so that during periods of drought or of predicted flooding the levels and release curves could be temporarily adjusted to accommodate the immediate needs. Giving the managing authority some flexibility to temporarily adjust the lake level guide lines to accommodate extreme weather conditions that may occur over a short period of time or possibly over several years would be an item of high benefit implemented with low cost and effort being one of the easiest changes to achieve with little or no environmental impact.

Flood Damage Reduction. Flood damage reduction is one of the primary purposes for the ACT system of Federal dams and at four APC dams. Concerns related to this category suggest that the Corps should revise current flood damage reduction to reflect the 50 years of basin alterations that have occurred since the original design of the flood damage reduction. Economic analysis of flood damage reduction must reflect the established levee system in the vicinity of Rome, Georgia. Established priority for releases should be developed, and only releases for authorized purposes or releases that have been approved through legislative actions should drive the decision process. Also, given the comments received on the Recreation issue, the Corps needs to consider flood potential of Rome if the winter pool is raised. Responders realize that it is going to be quite an undertaking for the Corps, as it always has been, to regulate the Allatoona and Carters pools so that the people downstream are protected from floods while providing for adequate water supply.

<u>Hydropower</u>. Hydropower production is recognized as an important economic resource in the ACT River Basin. Responses note that, whereas, it is important that hydropower continues to be a key component to obtaining energy in the basin, the Corps needs to consider that the economic benefits from hydropower production at Allatoona are minimal compared to the value of its recreational uses. Lake Allatoona levels need to remain high for the benefit of many basin resources, including hydropower production. If there are other basin resources competing for the ACT basin water, hydropower either needs to get its share of the water capacity from the projects or be compensated fairly for the loss (compensation meaning cost of replacement power).

The Corps usually generates hydropower at Carters Dam for a few hours each weekday, and then the turbines reverse and pump water back up from the Reregulation pool into Carters Lake when demand for electricity is low to have it available for use during the next peak use period (Corps, 1998). Therefore the water exiting the Reregulation pool into the lower Coosawattee River does not exhibit a hydropeaking flow regime. However, the USFWS recommends that the Corps compile and analyze the ramping rates exiting Carters Reregulation Dam to the Coosawattee River under existing operations. If downstream ramping rates are significantly different from ramping rates that would occur naturally in an unimpaired scenario, USFWS recommends that the Corps consider an alternative mode of operations at Carters Reregulation Dam that would more closely mimic natural flow variability, at least during the portion of the year that is most sensitive to aquatic organisms in the downstream Coosawattee River.

Georgia Power commented that the WCM update and the EIS should appropriately consider the water requirements to maintain long term operations at Plant Bowen and Plant Hammond. Both facilities are in the ACT River Basin and operated by Georgia Power. Georgia Power notes that both plants are critical components of the Georgia Power and Southern company generation fleet which provide electricity to citizens throughout the Southeast. Additionally, Alabama Power operates seven and four hydropower facilities on the Coosa and Tallapoosa Rivers respectively. Alabama Power also recommends that the updated WCM and associated EIS include water requirements for these facilities.

Navigation. In the case of navigation, comments suggest that the Corps has not provided the necessary funding or other needs to provide cost effective and reliable commercial navigation. The updated manual and EIS need to address these deficiencies and incorporate those requirements to fully restore navigation, a primary project purpose; while other goals and needs are extraneous. Comments note that the operation of the Alabama River under an updated water control manual should generate the highest output of benefits associated with those project purposes specifically authorized by the Congress. Any economic reanalysis that may be conducted as part of the EIS process should comply with the new Principles and Guidelines authorized in Water Resources Development Act 2007 (WRDA 2007), specifically, the use of multiple planning objectives, including public safety. Moreover, regional economic development of past capital investments in the project should be treated as sunk costs in a reanalysis while recognizing the waterway's unused transport capacity relative to other modes and resulting environmental and social benefits.

<u>Agriculture.</u> Comments suggest that raising and lowering Lake Allatoona taxes the surrounding agriculture. The only time the lake level should change is during heavy rains (lower levels for flood damage reduction) or drought (high levels to maintain stability of lake). The Corps should keep Lake Allatoona lake levels high for the benefit of all resources indicated.

## 3.3.3 Ecological Resources

The Ecological Resources category, including Fisheries and Threatened and Endangered Species was selected by 10 percent of the responders, with water level and habitat preservation issues receiving the largest number of specific comments. Comments suggest that the Corps should ensure sufficient quality and quantity of water be provided in such a manner to resemble the natural riverine flow regime. This flow regime should provide aquatic habitat conditions that support a diversity of endemic aquatic species (including fish, plants, mussels, and other invertebrates) and their life cycle requirements. Because many peer review studies indicate that current release flows and flow patterns do not protect aquatic wildlife at Federal or private projects, the biological response to these managed environmental flows should be evaluated and, if necessary, adjusted to meet the objective of maintaining ecological integrity.

Other comments note that a number of natural flow regime components (e.g., base, seasonal, and minimum/maximum flow levels, frequency/duration of low/high pulse flows, flow rise/fall rates and frequency of flow reversals) are important, even critical, to the long-term maintenance and protection of the basin's riverine fauna and habitats. They suggest that the Corps should consider conserving/recovering as many of these natural flow conditions as possible in the development and implementation of the new WCM for the ACT basin. Likewise, the ecological integrity of riverine systems is intimately connected to the quality and quantity of stream-side floodplain forests and wetlands. The Corps' WCM update process should address effects to the vegetation ecology of adjacent wetlands and floodplain forests, as well as the wildlife resources dependant on them including migratory birds. For example, the endangered wood stork (*Mycteria americana*) relies on the shallow wetland areas adjacent to the Alabama River for foraging during the summer and fall each year. The Corps' development of an updated WCM for the ACT basin should also reflect wildlife conservation actions identified in Alabama's Comprehensive Wildlife Conservation Strategy (CWCS) where appropriate.

Finally, comments suggest that current dam operations at Lake Allatoona have detrimental downstream effects on water quality and the natural flow regime in the Etowah River, including dissolved oxygen levels, water temperatures, and flows. The Corps' WCM update should consider, as mitigation, installing some method to increase dissolved oxygen levels in the Etowah River downstream of Allatoona Dam and if tailrace temperatures are likewise significantly altered from natural conditions, the Corps should consider a retrofit at Allatoona Dam that would more closely approximate natural water temperature distributions.

<u>Impact Mitigation</u>. Scoping comments recommend that the Corps should establish a goal to develop a fish passage plan for all Corps locks and dams in the ACT basin. Dams, in most cases, block the movement of catadromous, anadromous, and riverine fish species, resulting in fragmentation of native fish ranges and in disrupting life cycles of fish that depend on movement to specific locations to spawn, overwinter or over summer. Other comments suggest that the Corps should include an analysis of the impact of aquatic habitat loss due to the construction

(1962 - 1975) of Carters Lake on the Coosawattee River in the ACT WCM update DEIS and, as a result, appropriate mitigation measures should be determined and implemented.

<u>Fisheries</u>. Fisheries are an important aquatic component of the ACT basin ecological resource. Scoping comments point out that dams on the Alabama River have blocked historic migrations of more than a dozen species of fish for several decades, and have contributed to the decline of the critically important Alabama sturgeon. The Corps should continue to facilitate research on fish passage at Corps dams on the ACT, with the goal of implementing reservoir operations that allow riverine species to travel their historic migration pathways. A comment received on this topic suggests that the Corps' aquatic analysis must cover all effects on fish populations in both the river and in downstream reservoirs, not just T&E species.

Threatened and Endangered Species (T&E). The Corps must evaluate all direct and indirect effects of manual revisions on aquatic species throughout the ACT basin, particularly T&E species and particularly in Etowah and Coosa Systems (including main channel and bypass reach below Lake Weiss). There are at least 12 extant federally-listed species found in mainstream river reaches of the ACT basin that have potential to be affected by reservoir operations. There are also 8 federally-listed species found in tributary streams and nearby terrestrial habitats in the ACT basin that have potential to be affected by reservoir operations. In addition, critical habitat for 10 species of mussels has been designated throughout the ACT basin. Currently, critical habitat for one endangered species of fish (the Alabama sturgeon) has been proposed. The Corps needs to consider these species, other species that may be on the brink of requiring federal protection under ESA, and their associated habitat requirements in their analyses of the alternatives being considered under the ACT WCM update NEPA process.

Additionally, federally listed and candidate freshwater mollusks and fishes inhabit the mainstem rivers of the Coosa Basin below Carters and Allatoona. Within the last 11 years these species are known to include: the federally-threatened goldline darter in the Coosawattee River below Carters Reregulation Dam, potentially the federally-endangered Etowah darter in the Etowah River below Allatoona Dam, the federally-endangered triangular kidneyshell in the Coosawattee and Oostanaula Rivers, shell material of the federally-endangered southern clubshell in the Oostanaula and Coosa Rivers, and the Federal candidate species interrupted rocksnail in the Oostanaula River. A series of updated surveys of these federally-listed fishes and freshwater mollusks are recommended to accurately assess the potential impacts of the Corps' alternative actions.

## 3.3.4 Other Resources and Categories

The Other category was selected by 11 percent of responders, with over 50% of the comments received in this category being related to water level issues in the reservoirs and the transfer of water from one basin to another basin (interbasin transfer). Many of the water level comments were not related directly to water level effects on other basin resources, but were more directed toward the aesthetics of not having a full reservoir or not having sufficient water in the reservoirs

to maintain higher flows in the rivers. For example, a comment that lake levels and the amount of water that is being released downstream to Alabama and Florida are of primary concern, especially during the drought periods. The Corps needs to try to reduce the amount that they allow out to go downstream as much as possible to maintain water levels. Also, in the winter, the winter pool should not be reduced as much as it has been, even if the Corps has to do that on a temporary basis due to the drought conditions that were suffered this past year. Another comment suggests that it is in the best interest of all concerned to maintain summer pool elevation as long as practical, and to minimize length of time lake is held down in the winter; and that, in general, Lake Allatoona is well managed by the Corps.

Interbasin Water Transfers. Some of the comments received in this subcategory criticized the legislative process, such as a comment that Georgia legislators have totally failed to address interbasin transfers and procrastinate from enacting and enforcing an operable State Water Plan. The comment went on to state that the lack of a feasible State Water Plan leaves the Georgia Environmental Protection Division responding to local political pressures instead of managing water resources efficiently and cost-effectively for the State's future. One comment implied that the Corps should lead an Environmental Impact Study, in conjunction with the USEPA, to determine the deleterious effect that current and planned increases of interbasin transfers have on Lake Allatoona, the upper Etowah River, and the ACT watershed. Some of the other responders questioned the legitimacy of interbasin transfers. For example, the question was asked, would not Federal agencies supersede states' water rights because three States are involved in interbasin transfers from the ACT to the ACF. Another comment was that the interbasin transfers will destroy the Coosa River Basin chain of lakes. The comment stated that Carters and Allatoona are Federal Reservoirs, built and operated with all taxpayers' dollars. Atlanta was never a factor in the original plans for Carters and Allatoona, but they are taking water that was meant for the Coosa River Basin.

Postpone WCM Update. About 10 percent of the scoping comments received in the Other category direct the Corps to postpone the ACT WCM update project. The following highlights some of the scoping comments received on this topic. Lake Concerning the Martin Project, which is in the early stages of the Federal Energy Regulatory Commission (FERC) relicensing process and offers the opportunity for Alabama Power Company (APC) and the Corps to work together to develop optimal operating parameters for the Tallapoosa River reservoirs. The preliminary evaluation of changing the rule curve has been initiated by APC but additional studies and consultation among stakeholders are needed to fully evaluate the impacts of these changes on flood damage reduction, navigation, power generation, water quality, and other project and river basin resources. APC believes that the relicensing of the Martin Project be substantially completed before the Corps undertakes any comprehensive update of the ACT WCM. Concerning the current litigation between Alabama and Georgia, the Lake Martin Resource Association, Inc. (LMRA) urges the Corps to immediately suspend the revision of the ACT WCM update until such time as the litigation is resolved by the courts because resolution of this litigation will determine many aspects of water resource allocation between these two states

and possibly Florida. Likewise, the State of Alabama Office of Water Resources (Alabama OWR) urges the Corps to immediately suspend the manual update process until upcoming court rulings are issued.

Return Flows. Scoping comments received on this topic suggest that the Corps should study and implement operating rules that increase yield of federal projects via return flows and return flow credits, thereby encouraging communities to invest in environmentally responsible projects that maximize the rates of return water to the basin. This would also encourage implementation of conservation measures and improvements to system integrity designed to decrease "unaccounted for water" and policies to increase sewerage and decrease septic use. Similarly, the Corps should evaluate rules that afford credit for other "made flows" such as those resulting from upstream releases from dedicated storage projects, such as the Cobb County - Marietta Water Authority (CCMWA) and City of Canton Hickory Log Creek Reservoir. The Corps should also make use of this process to evaluate appropriate storage accounting mechanisms that accurately and fairly apportion reservoir inflows to the respective stakeholders.

Other input suggests that the Corps should clarify its policy with respect to return flows and consider granting all parties a right to return flow credits similar to the rights CCMWA has under its current storage contract. Granting credit for return flow would allow the Corps to avoid inherent conflicts with states' administration of water rights.

<u>Drought Management Plan</u>. Comments on this topic suggest that in updating the WCM, the Corps needs to develop and incorporate a comprehensive, basin-wide drought management plan including all ACT River basin projects, public and private, based on lessons learned during the 2007-2008 drought period. The drought plan should adequately identify water quality and quantity needs at various times of the year. The Corps should evaluate alternative operating rules that prudently and conservatively balance downstream flow requirements with the ability to capture and store water for use in times of drought. These operating rules must afford the Corps maximum management flexibility to quickly adapt to changing inflow conditions and should be evaluated and incorporated into any updated WCM for the ACT basin.

#### Modeling Tools.

Several of the agency, stakeholder, and public comment letters included suggestions for the Corps regarding analysis approaches and methodologies that could be used in the ACT WCM update EIS process. The following section summarizes some of these suggested methodologies.

To satisfy the Corps' obligations under Federal law, including the National Environmental Policy Act, the Alabama OWR suggests that the Corps must focus the ACT WCM update EIS process on the authorized purposes of the projects (hydropower, navigation, and flood damage reduction) and establish a scope for the manual update that address the following four steps in the order presented:

- 1. Determine the critical yield of each reservoir using most updated hydrologic and climate conditions.
- 2. Establish a baseline for any proposed changes to the water control or master manuals.
- 3. Assess whether any changes to baseline conditions are necessary to comply with existing laws and regulations designed to protect the environment.
- 4. Analyze any proposed modifications to the baseline to develop the proposed operations for each reservoir.

The Alabama OWR feels that it is necessary that the critical yields be calculated and the baseline established before any of the other steps are possible. The initial step is to update the critical yields for Lake Allatoona and Carters Lake, particularly covering the 2007 drought conditions. This should be done in an open public process and with the full participation of ACT basin stakeholders. Once this is completed, the Corps can then work to establish the baseline conditions (Step 2 above) against which any proposed modifications to the WCM can be assessed. The Alabama OWR feels that it is impossible to evaluate proposed changes to the WCMs unless the critical yields have been calculated and the baseline is established.

The first task to accomplish under Step 1 is to update the critical yield analysis for Lake Allatoona and Carters Lake, addressing the competing demands for water and water storage in the driest conditions – the droughts of record and particularly the 2007 drought conditions. Because the conditions in 2007 establish a new drought of record, the Alabama OWR respectfully requests that the Corps update its calculations of critical yield for Lake Allatoona and Carters Lake to include both previous droughts of record and the new 2007 drought of record.

Another responder believes that the Corps should utilize existing tools (suggested by APC in 16 May 2008 letter to the Corps) developed in recent years by APC in studying changes to the existing reservoir regulation manuals for the Weiss and Logan Martin developments on the Coosa River as part of the FERC relicensing process.

CCMWA agrees that the development of hydrological models is necessary and appropriate for the ACT WCM update process; however, these models need to be developed in a transparent process where model and underlying data can be shared with the stakeholders for evaluation and comment. The Alabama OWR suggests that the Reservoir Simulation Model (HEC-ResSim) should only replace the HEC-5 model after the technical staffs of the three states and the Corps agree that the HEC-ResSim model is a better tool to evaluate the ACT system. The CCMWA feels that it would be inappropriate and premature for the Corps to develop the HEC-ResSim model without input from the states and without sufficient time for the states to develop expertise required to evaluate the HEC-ResSim results. As a result, they suggest that the Corps should use the agreed upon HEC-5 model developed during the Comp Study and used in the negotiations of the allocation formula under the ACT River Basin Compact unless a new model development is agreed upon by the Corps and the states. The Alabama OWR respectfully requests that the Corps hold a public meeting with interested parties to discuss the appropriate modeling platforms

to be used for the ACT water control manual development. Whereas the U.S. Fish and Wildlife Service feels that Corps should go even further and establish a technical working group of water modelers from interested stakeholders who are familiar with the HEC-ResSim. This group would meet on a regular basis during and after the completion of the WCM update, to facilitate information sharing and involvement with the WCM update process. APC believes that the Corps should utilize other existing models and tools (suggested by APC in 16 May 2008 letter to the Corps) developed for studying changes to the existing reservoir regulation manuals on the Coosa River, Weiss and Logan Martin developments as part of their recent FERC relicensing process.

APC also suggests that the Martin Project is in the early stages of the relicensing process and offers the opportunity for APC and the Corps to work together to develop optimal operating parameters for the Tallapoosa River reservoirs. A significant issue in the relicensing process is the potential for changing the rule curves to increase pool elevations at Lake Martin during certain times of the year. APC has already completed an initial evaluation of changing the rule curve, but additional studies and consultation among stakeholders are needed to fully evaluate the impacts of these changes on flood damage reduction, navigation, power generation, water quality, and other project and river basin resources. Additionally, APC intends to incorporate modeling of the Harris Dam existing operations into the final Martin Study Plan so that they can determine potential impacts to the Harris Reservoir of any rule curve changes at the Martin Project. However, APC believes that the relicensing of the Martin Project be substantially completed before the Corps undertakes any comprehensive update of the ACT WCM.

#### 3.3.5 NEPA Process

<u>Scope of ACT WCM Update EIS</u>. A series of comments were received on this topic. One comment advises that because of the length and complexity of the ACT basin, the Corps must look comprehensively at the system when determining the proper scope of the EIS and evaluate impacts of and alternatives to the management of its reservoirs. Another comment suggests that the scope of the EIS should encompass the entire ACT basin down to Mobile Bay, as well as the ACF basin, the latter because of ongoing and proposed interbasin transfers of water.

Other comments suggest that in updating the ACT WCM, the Corps must thoroughly consider and analyze the present and proposed future operations of the APC projects and ensure that the operations of the federal reservoirs, including Lake Allatoona, are not subordinate to the needs of APC's private projects. As a first step in the ACT WCM update process, it is necessary that the critical yield of each reservoir be calculated using updated hydrologic and climate conditions and the baseline established before any of the other steps are possible. An important step in this process is to update the critical yields for Lake Allatoona and Carters Lake, particularly covering the 2007 drought conditions. This should be done in an open public process and with the full participation of ACT basin stakeholders.

Additionally, responders recommended that the WCM update process should consider the Corps' compliance with existing environmental laws. Specifically, the Corps should coordinate with the USFWS, the EPA and appropriate state agencies in Alabama and Georgia to ensure that the water control manuals are compliant with the Endangered Species Act and the Clean Water Act, as well as the Water Supply Act and the Flood Control Act.

Finally, one comment addressed the fact that the Corps intends to document existing water management operations rather than prepare a comprehensive update of the water control plan that would include consideration of alternative operations for the Corps' projects. Such a preordained and limited process would do a great disservice to all those who rely on the Corps and its management of the water resources of the ACT River Basin, and would fall far short of meeting the Corps' obligations under NEPA. The purpose of the update to the WCM should be to develop an operational plan that most effectively manages the water resources in the ACT River Basin for the highest and best use.

Impact Analysis. Comments on this topic note that decisions made regarding flow into and out of Lake Allatoona can affect communities and species located many miles downstream, as well as water quality in the lake itself. Therefore, revisions to the ACT water control manual will have obvious consequences to the current uses of Lake Allatoona, for the amounts of water released downstream, and for the aquatic habitat in the lake the rest of Etowah and Coosa River Basins. Because of these consequences, the Corps must base decisions on objective and transparent body of scientific data to underpin its comparative analysis of water release alternatives. Likewise, comments agree that the development of hydrological models is both necessary and appropriate; however, these models need to be developed in transparent process where model and underlying data can be shared with the stakeholders for evaluation and comment.

Finally, comments recommend that the Corps should conduct an analysis of cumulative impacts of maintaining or increasing flows out of Allatoona Dam to enhance ecological function in the Coosa River below Jordan Dam. Responder would also like to see analysis of cumulative effects of FERC relicensing process of eight APC dams in the ACT basin.

<u>Alternatives</u>. In updating the WCM for the ACT River Basin, a commenter stressed that it is imperative that the Corps thoroughly analyze the entire range of reasonable operating alternatives and not simply document existing operations. The Corps must not constrain itself at the outset to consider alternative plans that are limited by the Corps legal authority to change existing operations. Rather, the Corps should consider all reasonable alternatives to determine the highest and best use of reservoir storage given current conditions in the basin. If Congressional approval is required to implement the preferred water control operations, then the Corps should seek such approval.

Allatoona Dam operates in a hydro-peaking mode, generating power between 2 to 6 hours during normal operations each weekday. Weekend generation may occur if required to meet customer

needs, but generally only about 250 cubic feet per second minimum flow is released on weekends. Scoping comments recommend that the Corps should consider dam operations at Allatoona Dam that would more closely mimic the natural flow regime, such as implementing a non-peaking window during the portion of the year that is most sensitive to aquatic organisms in the downstream Etowah River and develop a WCM minimum flow operation alternative that more closely approximates the natural flow regime. This could be compared to baseline and other operation alternatives for potential relative effects using the Riverine Community Habitat Assessment and Restoration Concept (RCHARC) or other similar methodology as was done in the ACT basin water allocation DEIS.

One comment suggests that the Hickory Log Creek Reservoir permit should be considered as a proposed modification of the operations of the reservoir during this aspect of the manual update process. In addition, other proposed reallocations of water storage need to be assessed in the process including the State of Georgia's new water supply plan that includes various assumptions and projections regarding their use of water from federal reservoirs, Lake Allatoona and Carters Lake, over the next several years. Finally, a determination should be made whether the Corps has the authority to undertake the reallocation or must seek Congressional authorization to implement the proposed reallocations.

<u>Baseline Conditions.</u> One set of comments suggest that establishment of the baseline must originate with the original congressional authorizations or following any approved reallocations. The current flood damage reduction operations must be revised to reflect the 50 years of basin alterations that have occurred since the original design of the flood damage reduction operations. There must be established priority for releases. Only releases for authorized purposes or releases that have been approved through legislative actions should drive the decision process.

The Alabama OWR understands that the Corps intends to use 2004 as the "baseline condition" for the WCM update, based on the date that the ACT River Basin Compact (ACT Compact) expired. However, the Alabama OWR believes that no permanent, vested or perpetual right to water was granted for any increased water withdrawals that occurred after January 3, 1992 if or when the ACT Compact expired. Therefore, the Alabama OWR suggests that the Corps should use the currently approved WCMs for each reservoir, e.g. the 1979 water control plan for Carters Lake and the 1962 water control plan for Lake Allatoona, to establish baseline or "no action" conditions for evaluating alternatives operations under the ACT WCM update process. With the expiration of the ACT Compact, the "live and let live provision" as well expired, and there can be no expectation that water withdrawals in excess of contract amounts will be incorporated into the "baseline" conditions.

Moreover, another set of comments suggest that the baseline should be based on the amount of storage currently under contract and should assume that the contract amounts establish limits or caps on the amount of water that can be withdrawn for water supply purposes. Specifically, the baseline should not assume that the current practice of allowing water withdrawals in excess of contract amounts by the CCMWA will be continued in the future.

<u>Public Communication.</u> Comments on the public communication and scoping meetings topics varied widely. One commenter stated that more than 50% of the attendees in Kennesaw, Rome, and Gadsden expressed their concern that there was no opportunity for public dialogue, feeling that there should be a way to maintain control of the meeting, be considerate of the time schedule, and at the same time, allow for public questions and comments. Several persons left early because there was no opportunity to "voice" their concerns to the entire gathering. Some drove several hours with the intent to speak at a public meeting. Another comment stated that the scoping meetings offered a very good and informative session and wished that more people would have known about it. Another comment thanked the Corps for offering the public an opportunity to weigh in on the pending manual updates.

#### 3.3.6 Cultural Resources

No specific comments were received on this resource category, although almost 1 percent of responders indicated that this was an area of concern to them.

# 4. Conclusions

This effort represents the culmination of the first phase of the EIS to update the WCM for the (ACT) River Basin in Alabama and Georgia.

As highlighted in Section 2, the objective of the scoping process is to determine the scope of issues to be addressed and to identify the significant issues to be analyzed in depth related to the proposed action (40 CFR 1501.7). This process also serves to deemphasize insignificant issues, narrowing the scope of the EIS process accordingly (40 CFR1500.4(g)). Scoping results in the identification by the proponent of the range of actions, alternatives, and impacts to be considered in the EIS (40 CFR 1508.25).

Furthermore the scoping process was intended to:

- Encourage interested parties to participate in the WCM Update project design and scope;
- Provide early public access to information about program background, purpose, progress updates, and Corps intentions;
- Solicit information and comments from interested parties; and
- Facilitate effective communication between the Corps and interested parties.

The initial scoping efforts were successful in providing regulatory agencies and the general public opportunities to understand the proposed action and provide specific feedback to the Corps about possible concerns, issues, and other actions completed, underway, or proposed within the ACT Basin that could affect or be affected by the proposed action. Additionally, the adequacy of tools to assist in the evaluation of the proposed action and alternatives were discussed. All of these efforts enhance the likelihood that the EIS will adequately address the potential effects of the proposed action and any alternatives.

Comments received during this initial scoping period were used to structure the issues that are likely to be addressed in the EIS. Scoping is a dynamic process and as such, the Corps will continue to give consideration to all relevant concerns/input as the WCM's and EIS is being developed.

## 4.1 Relevant Stakeholder Comments for Consideration

Based upon analysis of all comments received during the scoping process integrated with information and knowledge obtained during previous efforts to update the WCM's, the following key issues were identified:

- Timing of WCM Update EIS
- Scope of the EIS
- Baseline Conditions Definition
- Alternatives Development
- Impact Assessment Process

• Biological Response and Hydrologic Modeling

#### 4.2 Additional Resource Areas for Consideration in the EIS

Beyond those issues specifically highlighted by public and agency comments, the following resource areas will also be addressed in the EIS since the proposed action has the potential to impact these resources:

- Cultural Resources
- Hazardous and Toxic Materials
- Landuse
- Ecological Communities
- Infrastructure Systems (Utilities and Transportation)
- Soils and Geology (As they impact shoreline erosion and water quality)

#### 4.3 Considerations For The EIS

In October 2007, the Secretary of the Army directed the Corps to update the *Water Control Manual for the Alabama-Coosa-Tallapoosa (ACT) River Basin*. An updated WCM that includes water control plans for all the Corps projects in the ACT River Basin is required by Engineer Regulation 1110-2-240. The WCM needs to describe project operations for congressionally authorized and general statutory project purposes in the basin while balancing private, community, social, and economic needs and sound environmental stewardship. The purpose of the proposed action is to update the WCM to include current project operations under the existing congressional authorizations, taking into account changes in basin hydrology and consumptive demands due to years of growth and development, new or rehabilitated structural features, and environmental issues.

Several key concerns resonated in comments provided by the public and agencies;

- 1. What is the baseline condition against which alternatives will be evaluated?
- 2. Will there be continued and frequent public involvement in the process? and;
- 3. How will the Corps decide on the final modeling tools (hydrologic and ecological) that will be used to evaluate the impacts of the proposed action and alternatives?

Use of the interactive website by the Corps to receive and evaluate comments was given high marks by the general public and agencies. Based upon these comments, consideration should be given to maintaining this site or something similar throughout the development of the update to the WCM and EIS.

As it relates to key issue #3 above, the Corps HEC-ResSim workshop held at Jim Woodruff Lock and Dam from September 30, 2008 through October 2, 2008 proved to be a very valuable workshop with regards to communicating the hydrologic modeling capabilities of the ReSim software. Moving forward, it will be very important to show how ResSim can be utilized to

drive the environmental response models necessary to evaluate potential impacts to environmental resources.

It is anticipated that the EIS will take approximately two years to complete. A Notice of Availability (NOA) will be published in the *Federal Register* when the Draft EIS is available for public review. Public Meetings will also be held following publication of the NOA to solicit comments on the Draft EIS. Each comment and the corresponding response will be incorporated into the EIS. The Final EIS and Record of Decision are currently anticipated for publication in late 2011. Throughout this process, the public can obtain information on the status and progress of the proposed action and the EIS by contacting Mr. Chuck Sumner, Biologist, Mobile District, Environment and Resources Branch, Planning and Environmental Division, U.S. Army Corps of Engineers, Post Office Box 2288, Mobile, AL 36628-0001; telephone (251) 694–3857; or email Lewis.C.Sumner@usace.army.mil; or visit the website at <a href="https://www.act-wcm.com">www.act-wcm.com</a>.

The scoping report is posted at <a href="www.act-wcm.com">www.act-wcm.com</a> and can be downloaded with or without the appendices.

# 5. Literature Cited

- U.S. Army Corps of Engineers (Corps). April 2000. Water Resources Project Planning Guidance (ER 1105-2-100, 2000).
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