



**ADEM  
RESERVOIR WATER QUALITY  
AND  
FISH TISSUE MONITORING  
PROGRAM REPORT  
1992- 1993**

**Special Studies Section  
Field Operations Division**

**ADEM**  
**Reservoir Water Quality**  
**and**  
**Fish Tissue Monitoring**  
**Program Report**  
**1992-1993**

**Special Studies Section  
Field Operations Division  
Alabama Department of Environmental Management**

## Table of Contents

	Page
<u>Introduction</u> . . . . .	1
<u>Clean Lakes Program Diagnostic/Feasibility Studies</u> . . . . .	5
<u>Materials and Methods</u> . . . . .	8
RWQM Sampling Locations . . . . .	8
Water Quality Assessment . . . . .	8
Algal Growth Potential Tests . . . . .	14
Fish Tissue Monitoring Program . . . . .	15
Quality Control/Quality Assurance . . . . .	15
Data Management and Reporting . . . . .	15
<u>Results and Discussion</u> . . . . .	17
Trophic Status . . . . .	17
Algal Growth Potential Tests . . . . .	22
Use Support Status . . . . .	24
Fish Tissue Monitoring Program . . . . .	35
<u>Literature Cited</u> . . . . .	41
<u>Appendix A</u> : Vertical Profile Measurements and Results of Laboratory Analyses .	43
<u>Appendix B</u> : National Weather Service Data . . . . .	84
<u>Appendix C</u> : Fish Tissue Monitoring Program Sampling Locations . . . . .	89

## Tables

	Page
1. Clean Lakes Program Projects on Alabama Reservoirs . . . . .	6
2. Reservoirs sampled during the ADEM Reservoir Water Quality Monitoring Program, 1992-1993 . . . . .	9
3. Monitoring sites for the ADEM Reservoir Water Quality Monitoring Program, 1992-1993 . . . . .	10
4. Water quality variables measured during the ADEM Reservoir Water Quality Monitoring Program, 1992-1993 . . . . .	13
5. Bioaccumulative contaminants with FDA advisory levels generally used in the issuance of fish consumption advisories in Alabama . . . . .	16
6. Trophic state index values of Alabama reservoirs for the Summers of 1985, and 1989-1993 . . . . .	18
7. Purdy Reservoir algal growth potential tests . . . . .	23
8. Use support status of individual lakes . . . . .	25
9. Sites monitored during the ADEM Fish Tissue Monitoring Program, 1992-1993 . . . . .	36
10. Waterbodies affected by fish consumption restrictions . . . . .	40

## **Figures**

	<b>Page</b>
<b>Figure 1. Publicly-owned lakes of Alabama . . . . .</b>	<b>2</b>

## INTRODUCTION

### ADEM Reservoir Water Quality Monitoring Program

Section 314(a)(1) of the Water Quality Act of 1987 requires states to conduct assessments of the water quality of publicly-owned lakes and report the findings as part of their biennial 305(b) Water Quality Report To Congress. Funding for the assessments is provided by Lake Water Quality Assessment (LWQA) grants administered through the Clean Lakes Program of the United States Environmental Protection Agency (EPA). Submittal to the EPA of approved lakes assessment information from states ensures continued eligibility for financial assistance under the Clean Lakes Program.

The Alabama Department of Environmental Management (ADEM) has defined publicly-owned lakes/reservoirs as those that are of a multiple-use nature, publicly-accessible, and exhibit physical/chemical characteristics typical of impounded waters. Lakes designated strictly for water supply, privately owned lakes, or lakes managed by the Alabama Department of Conservation and Natural Resources (ADCNR) strictly for fish production are not included in this definition. Lakes meeting the above definition are listed in Figure 1.

In 1985, the need for information on the trophic state of Alabama's publicly-owned lakes led to an initial survey conducted by ADEM with the assistance of the Environmental Protection Agency (EPA), Region IV, Environmental Services Division. The survey established limited baseline information on the lakes and was used to rank them according to trophic condition (Raschke 1985).

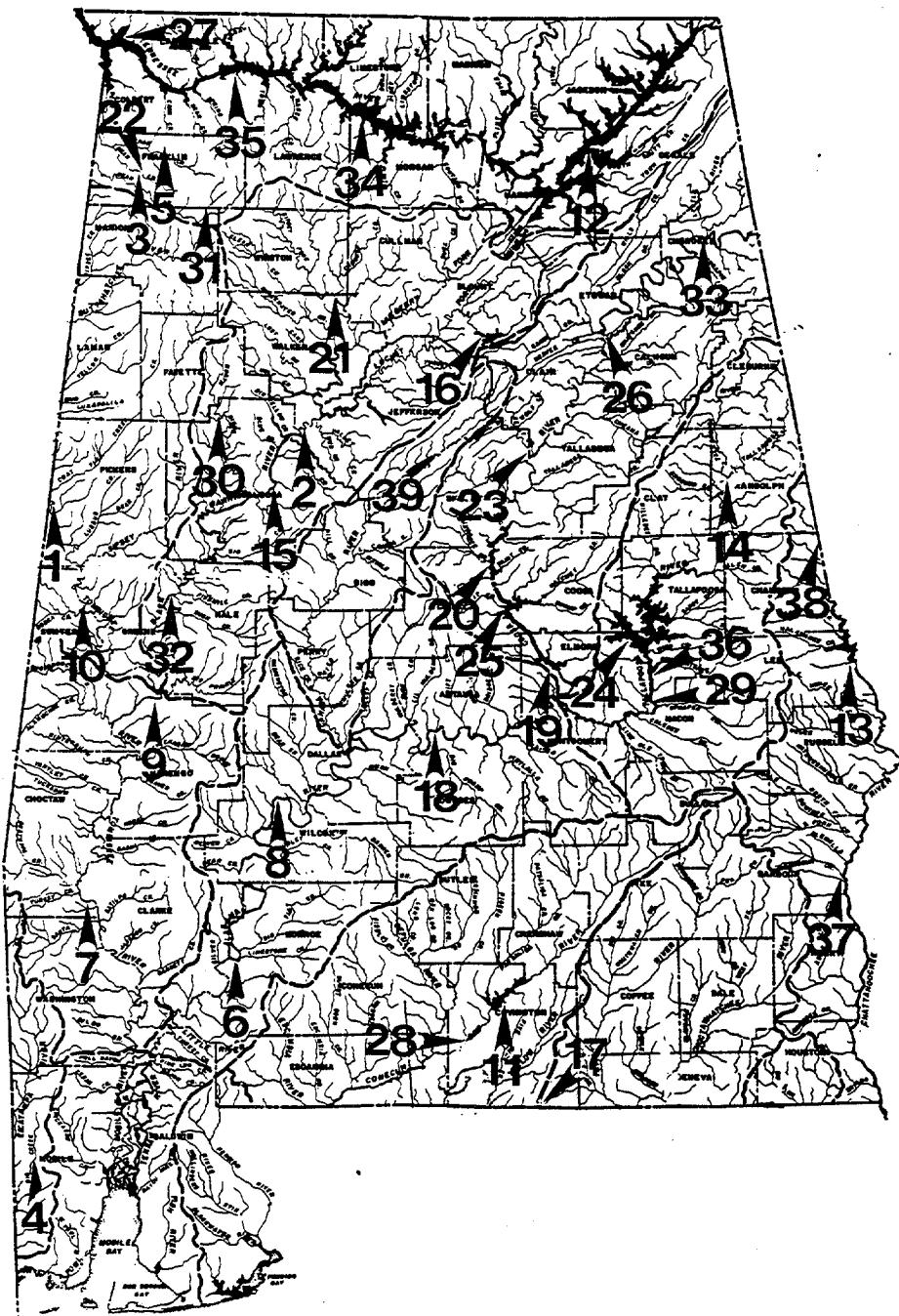
In 1989, LWQA funds enabled the ADEM to conduct required water quality assessments of thirty-four publicly-owned lakes in the state and submit the collected information as part of the 1990 305(b) Water Quality Report to Congress (ADEM 1989). Trophic state index (TSI) values calculated from data gathered for the water quality assessments indicated potentially significant increases when compared to TSI values from the study conducted in 1985.

In 1990, the Reservoir Water Quality Monitoring (RWQM) Program was initiated by the Special Studies Section of the Field Operations Division of ADEM. Objectives of the program are as follows:

- a) to develop an adequate water quality database for all publicly-owned lakes in the state;
- b) to establish trends in lake trophic status that can only be established through long-term monitoring efforts;
- c) to satisfy the requirement of Section 314(a)(1) of the Water Quality Act of 1987 that states conduct assessments of the water quality of publicly-owned lakes and report the findings as part of their biennial Water Quality Report to Congress.

Figure 1

Publicly-Owned Lakes of Alabama



1. Aliceville
2. Bankhead
3. Bear Creek
4. Big Creek
5. Cedar Creek
6. Claiborne
7. Coffeeville
8. Dannelly
9. Demopolis
10. Gainesville
11. Gantt
12. Guntersville
13. Harding
14. Harris
15. Holt
16. Inland
17. Jackson
18. Jones Bluff
19. Jordan
20. Lay
21. Lewis Smith
22. Little Bear Crk
23. Logan-Martin
24. Martin
25. Mitchell
26. Neely Henry
27. Pickwick
28. Point A
29. Thurlow
30. Tuscaloosa
31. Upper Bear Crk
32. Warrior
33. Weiss
34. Wheeler
35. Wilson
36. Yates
37. W. F. George
38. West Point
39. Purdy

Acquiring this information enables the ADEM to determine the lakes in which water quality may be deteriorating and are in need of more intensive study to establish causes and extent of the deterioration.

In 1991, additional funding received through the Clean Lakes Program enabled the expansion of the RWQM Program to include all of the 39 publicly-owned lakes in the state, including border lakes not included in earlier water quality assessments. Expansion of the program also included more extensive monitoring of lakes for which water quality concerns were greatest.

At present, all publicly-owned lakes in the state are monitored every two years. Lakes indicated to be use-threatened or impaired from previously collected data are monitored annually. The RWQM Program Report is produced every two years in concert with the biennial 305b Water Quality Report to Congress.

#### TVA Reservoir Vital Signs Monitoring Program

Water quality monitoring of reservoirs of the Tennessee River system is conducted by the Tennessee Valley Authority (TVA) through its Reservoir Vital Signs Monitoring Program.. Objectives of the program are to provide basic information on the "health" or integrity of the aquatic ecosystem in each TVA reservoir and to provide screening level information for describing how well each reservoir meets the "fishable" and "swimmable" goals of the Clean Water Act. Sampling activities involve examination of appropriate physical, chemical, and biological indicators in the forebay, mid-region, and headwaters areas of each reservoir. Initiated in 1990, the TVA program provides results of monitoring activities to ADEM on an annual basis through program reports.

#### The ADEM Fish Tissue Monitoring Program

The ADEM Fish Tissue Monitoring Program is conducted by the ADEM in cooperation with the Alabama Department of Public Health (ADPH), the Alabama Department of Conservation and Natural Resources (ADCNR), and the Tennessee Valley Authority (TVA). Initiated in 1991, the program's objective is the collection and analysis of fish tissue samples from all major reservoirs and streams in Alabama over a five-year period. Sampling is conducted by basin with 28 major reservoirs, 26 stream locations, and 19 state public fishing lakes sampled on a rotational basis. Additional water bodies may also be monitored based on identified need.

Following collection, fish tissue samples are analyzed for concentrations of bioaccumulative contaminants and the results reviewed by the ADPH. Based on the results, fish consumption advisories are issued by the ADPH where needed. Most advisories to date have been issued following comparison of fish tissue contaminant levels with FDA and EPA action levels.

Each year, sampling locations for the program are established based on information available to the ADEM and input from the cooperating agencies. Waterbodies that have been identified as having elevated concentrations of bioaccumulated contaminants or those that have a high potential for contamination are closely monitored.

## **Clean Lakes Program Phase I Diagnostic/Feasibility Studies**

The Clean Lakes Program was established by Section 314 of the federal Water Pollution Act of 1972, with initial funding provided in 1976. Through the program, EPA provides financial and technical assistance to enable States, Indian tribes, and local communities to protect and restore the quality of their lakes. Currently, financial assistance is provided to the state of Alabama through LWQA grants and Phase I Diagnostic/ Feasibility Studies.

The Phase I Diagnostic/Feasibility Study is a two-part study designed to determine a lake's current condition and develop a proposed program for protection and restoration of designated uses. Lakes submitted for available Phase I funding each year are selected through each state's assessment process. Information concerning each of the current Clean Lakes Program Phase I Projects appears in Table 1.

Initiated in 1990, Clean Lakes Program Phase I Diagnostic/Feasibility Studies continued on Weiss and West Point Reservoirs during 1992-1993. Objectives of the West Point Study are as follows:

- a) determine water quality conditions of West Point Reservoir and several of its important tributary streams and embayments and provide data needed to refine predictive water quality models generated for the reservoir;
- b) refine temporal and spatial distribution of fecal coliforms within the reservoir under varying hydrologic conditions;
- c) determine the quality of bottom sediments and estimate sedimentation rates;
- d) determine the quantity and distribution of toxic contaminants in fish and bottom sediments.

Objectives of the Weiss Reservoir Study are as follows;

- a) determine current water quality conditions of the reservoir and several of its important tributary streams and embayments;
- b) estimate nutrient loading from three gauged tributaries;
- c) determine land use in a large portion of the watershed;
- d) measure polychlorinated biphenyl (PCB) concentrations in reservoir sediments.

A Phase I Study of Walter F. George Reservoir was initiated during 1992. The Study follows an earlier Phase I Study conducted by the Georgia Department of Natural Resources (DNR) from 1990-1992 and a limited water quality study funded by the

**Table 1. Clean Lakes Program Projects on Alabama Reservoirs.**

Name of Project	Type of Project	Conducting Agency	Initiation Date	Completion Date (Projected)
West Point Reservoir	Phase I Diagnostic/Feasibility	Cooperative Agreement ADEM/Auburn University	Jun-90	Sep-94
Weiss Reservoir	Phase I Diagnostic/Feasibility	Cooperative Agreement ADEM/Auburn University	Nov-90	Apr-94
W. F. George Reservoir	Phase I Diagnostic/Feasibility	Cooperative Agreement ADEM/Auburn University	Nov-92	Jan-95
Neely Henry Reservoir	Phase I Diagnostic/Feasibility	Cooperative Agreement ADEM/Auburn University	Apr-93	Oct-95

Corps of Engineers and conducted by Auburn University in 1992. Objectives of the Walter F. George Reservoir Study are as follows:

- a) further document water quality conditions of W. F. George Reservoir and its important tributary streams and embayments;
- b) estimate nutrient loading from the important Alabama tributaries;
- c) to further review sources and estimate impacts of both point and non-point sources within the watershed contained in Alabama;
- d) to identify the nutrient limiting phytoplankton biomass and production;
- e) to identify and evaluate macrophyte distribution within the lake.

A Phase I Diagnostic/Feasibility study of Neely Henry Reservoir was initiated during 1993. Objectives of the Neely Henry Reservoir Study are as follows:

- a) further document water quality conditions of Neely Henry Reservoir and its important tributary streams and embayments;
- b) estimate nutrient loading from the important tributaries;
- c) to further review sources and estimate impacts of both point and non-point sources within the watershed;
- d) to identify the nutrient limiting phytoplankton biomass and production;
- e) to identify and evaluate macrophyte distribution within the reservoir;
- f) to analyze for priority pollutants of interest in reservoir sediments and fish tissue.

All current Phase I Studies are conducted through cooperative agreements between the ADEM and Auburn University.

## MATERIALS AND METHODS

### RWQM Sampling Locations

Reservoirs sampled during 1992-1993 appear in Table 2. Locations of sampling sites appear in Table 3. All reservoirs were sampled in the dam forebay. Multiple sites were sampled on larger reservoirs. Water quality measurements and water sample collections were conducted from boats positioned at the deepest point of the channel at each sampling site.

### Water Quality Assessment

Reservoirs were sampled once during the Spring and once during the Summer season. Sampling was conducted during a minimum time period and as closely as possible to dates from previous studies to reduce seasonal variability.

Monitoring and analyses were conducted in accordance with appropriate standard operating procedures. Water quality variables measured during 1992 and 1993 appear in Table 4.

At each sampling site temperature, dissolved oxygen, specific conductance, and pH were measured in situ at multiple depths in the water column with Hydrolab Surveyor II or Surveyor III instruments.

A standard, 20 cm diameter Secchi disk with attenuating black and white quadrants was used to measure visibility. Secchi disk visibility was multiplied by a factor of four to estimate depth of the photic zone in 1992. During 1993, photic zone depth determinations were made by measuring the vertical illumination of the water column using an underwater photometer. The depth at which one percent of the surface illumination was measured by the photometer was considered the photic zone depth.

A composited water sample of ten liters was collected from the photic zone. The sample was collected by raising and lowering a plastic submersible pump and hose apparatus repeatedly through the photic zone while collecting the sample in a plastic container. Withdrawal of individual samples from the composited water sample occurred in the order presented in the following paragraphs.

Chlorophyll a samples were collected by filtering a minimum of 500 ml of the composited photic zone sample through glass fiber filters immediately after collection of the composited sample. Immediately after filtering, each filter was folded once and placed in a 50 mm petri dish. Each petri dish was wrapped in aluminum foil, sealed in a ziploc bag, and placed on ice for shipment to the Field Operations Division to be frozen until analyzed. Corrected chlorophyll a concentrations were used in calculating Carlson's trophic state index (TSI) for lakes (Carlson 1977).

Table 2. Reservoirs sampled during the ADEM Reservoir Water Quality Monitoring Program, 1992-1993.

Reservoir	Surface Area (acres)	Drainage Area (sq. miles)	River Basin
Aliceville	8,300	5,785	Tombigbee
Bankhead	9,200	3,969	Warrior
Big Creek	3,600	105	Escatawpa
Claiborne	5,930	21,473	Alabama
Coffeeville	8,800	18,417	Tombigbee
Dannelly	17,200	20,700	Alabama
Demopolis	10,000	15,385	Tombigbee
Gainesville	6,400	7,142	Tombigbee
Gantt	2,767	658	Conecuh
Harding	5,850	4,240	Chattahoochee
Holt	3,296	4,232	Warrior
Inland	1,095	69	Warrior
Jackson	350	---	Choctawhatchee
Frank Jackson	1,037	74	Conecuh
Jordan	6,800	10,165	Coosa
Lay	12,000	9,087	Coosa
Logan-Martin	15,260	7,700	Coosa
Martin	39,000	3,000	Tallapoosa
Mitchell	5,850	9,827	Coosa
Neely-Henry	11,235	6,600	Coosa
Point A	900	1,277	Conecuh
Purdy	1,050	43	Cahaba
Lewis Smith	21,200	944	Warrior
Tuscaloosa	5,885	416	Warrior
Warrior	7,800	5,810	Warrior
Weiss	30,200	5,270	Coosa
Woodruff	12,510	16,300	Alabama

Table 3. Monitoring sites for the 1992-1993 ADEM Reservoir Water Quality Monitoring Program.

Reservoir	Site	Latitude/ Longitude			County	Section, Township, Range
Aliceville	Sta. 1	33	12	45	Pickens	SW 1/4, Sec 23, T21S, R17W
		88	17	13		
Bankhead	Sta. 1	33	27	38	Tuscaloosa	NW 1/4, Sec 23, T18S, R8W
		87	21	05		
Big Creek	Sta. 1	30	42	53	Mobile	NE 1/4, Sec 12, T4S, R4W
		88	20	11		
Claiborne	Sta. 1	31	37	02	Monroe	NE 1/4, Sec 34, T8N, R5E
		87	33	06		
Coffeeville	Sta. 1	31	45	04	Clarke	SW 1/4, Sec 13, T9N, R2W
		88	08	19		
Dannelly	Sta. 1	32	06	10	Wilcox	NW 1/4, Sec 17, T13N, R7E
		87	23	54		
	Sta. 2	33	03	12	Wilcox	SW 1/4, Sec 34, T13 N, R8E
		87	15	33		
	Sta. 3	32	09	55	Dallas	SW 1/4, Sec 19, T14N, R10E
		87	06	55		
Demopolis	Sta. 1	32	31	13	Marengo	NW 1/4, Sec 22, T18N, R2E
		87	52	40		
Gainesville	Sta. 1	32	51	00	Greene	SW 1/4, Sec 36, T22N, R2W
		88	09	20		
Gantt	Sta. 1	31	24	14	Covington	NW 1/4, Sec 17, T5N, R16E
		86	28	45		
Harding	Sta. 1	32	39	52	Lee	SW 1/4, Sec 01, T19N, R29E
		85	05	35		
	Sta. 2	32	41	19	Lee	NE 1/4, Sec 34, T20N, R29E
		85	07	12		
Holt	Sta. 1	33	15	12	Tuscaloosa	NE 1/4, Sec 2, T21S, R9W
		87	26	45		
Inland	Sta. 1	33	50	08	Blount	NW 1/4, Sec 9, T14S, R1E
		86	33	03		
Jackson	Sta. 1	30	59	39	Covington	NE 1/4, Sec 27, T6N, R21W
		86	19	32		
Frank Jackson	Sta. 1	31	17	54	Covington	SE 1/4, Sec 19, T4N, R18E
		86	16	57		
Jordan	Sta. 1	32	37	20	Elmore	SW 1/4, Sec 15, T19N, R18E
		86	15	41		
	Sta. 2	32	40	33	Elmore	SE 1/4, Sec 35, T20N, R17E
		86	19	47		

Table 3. (Continued)

Reservoir	Site	Latitude/ Longitude			County	Section, Township, Range
Lay	Sta. 1	32	58	05	Coosa	NW 1/4, Sec 19, T23N, R15E
		86	31	01		
	Sta. 2	33	13	13	Talladega	NW 1/4, Sec 08, T21S, R2E
		86	27	55		
	Sta. 3	33	06	35	Shelby	NE 1/4, Sec 24, T21S, R2E
		86	29	25		
	Sta. 4	33	05	12	Shelby	NE 1/4, Sec 12, T24N, R15E
		86	31	23		
	Sta. 5	33	08	55	Talladega	NE 1/4, Sec 05, T22S, R2E
		86	27	20		
Logan-Martin	Sta. 1	33	25	39	Talladega	NW 1/4, Sec 33, T18S, R3E
		86	20	00		
	Sta. 2	33	35	39	Talladega	SW 1/4, Sec 34, T16S, R4E
		86	12	50		
Martin	Sta. 1	32	40	53	Elmore	SE 1/4, Sec 25, T20N, R21E
		85	54	42		
	Sta. 2	32	44	00	Tallapoosa	NW 1/4, Sec 8, T20N, R22E
		85	53	02		
	Sta. 3	32	44	34	Elmore	SW 1/4, Sec 4, T20N, R21E
		85	57	47		
	Sta. 4	32	51	45	Tallapoosa	SW 1/4, Sec 30, T22N, R22E
		85	54	10		
Mitchell	Sta. 1	32	48	23	Coosa	NE 1/4, Sec 14, T21N, R16E
		86	26	42		
	Sta. 2	32	53	55	Coosa	NE 1/4, Sec 08, T22N, R16E
		86	29	17		
Neely-Henry	Sta. 1	33	47	05	Calhoun	SW 1/4, Sec 30, T14S, R6E
		86	3	14		
	Sta. 2	33	59	28	Etowah	NW 1/4, Sec 15, T12S, R6E
		85	59	57		
Point A	Sta. 1	31	21	57	Covington	NE 1/4, Sec 35, T5N, R15E
		86	31	01		
Purdy	Sta. 1	33	27	33	Shelby	SW 1/4, Sec 17, T18S, R1W
		86	40	00		
Smith	Sta. 1	33	56	37	Walker	NW 1/4, Sec 06, T13S, R5W
		87	06	20		
	Sta. 2	33	59	06	Walker	SE 1/4, Sec 19, T12S, R6W
		87	12	10		
	Sta. 3	34	03	55	Winston	NE 1/4, Sec 27, T11S, R7W
		87	15	30		

Table 3. (Continued)

Reservoir	Site	Latitude/ Longitude			County	Section, Township, Range
Tuscaloosa	Sta. 1	33	16	03	Tuscaloosa	NW 1/4, Sec 32, T20S, R9W
		87	30	30		
	Sta. 2	33	22	43	Tuscaloosa	SE 1/4, Sec 20, T19S, R10W
		87	35	55		
W. F. George*	Sta. 1	31	37	48	Henry	SW 1/4, Sec 30, T8N, R30E
		85	04	27		
	Sta. 4	31	53	35	Barbour	SW 1/4, Sec 34, T11N, R 29E
		85	07	14		
	Sta. 6	32	05	15	Russell	NE 1/4, Sec 29, T13N, R30E
		85	02	44		
	Warrior	32	46	49	Hale	NE 1/4, Sec 24, T21N, R2E
		87	50	18		
Weiss	Sta. 2	32	53	41	Greene	SE 1/4, Sec 9, T22N, R3E
		87	47	07		
	Sta. 1	34	10	24	Cherokee	SW 1/4, Sec 12, T10S, R8E
		85	45	17		
	Sta. 2	34	12	54	Cherokee	NW 1/4, Sec 32, T9S, R10E
		85	36	38		
	Sta. 3	34	12	38	Cherokee	SE 1/4, Sec 35, T9S, R10E
		85	32	52		
West Point*	Sta. 4	34	10	45	Cherokee	SW 1/4, Sec 09, T10S, R11E
		85	29	04		
	Sta. 1	32	55	11	Troup, GA	---
		85	11	04		
	Sta. 2	32	59	54	Troup, GA	---
		85	12	01		
Woodruff	Sta. 1	32	19	42	Lowndes	SE 1/4, Sec 29, T16N, R13E
		86	46	52		
	Sta. 2	32	20	30	Lowndes	NE 1/4, Sec 27, T16N, R15E
		86	32	14		
	Sta. 3	32	26	35	Montgomery	NW 1/4, Sec 24, T17N, R17E
		86	19	33		

\* Station locations established by Auburn University during Phase I studies

**Table 4. Water quality variables measured during the 1992-1993 ADEM Reservoir Water Quality Monitoring Program.**

Variable	Method	Reference	Detection Limit
<b>Physical</b>			
Vertical illumination	Photometer, Secchi disk	Lind, 1979	---
Temperature	Thermistor	APHA et al. 1985	---
Turbidity	Nephelometer	APHA et al. 1985	---
Total dissolved solids	Filtration, drying	EPA-600/4-79-020	1 mg/l
Total suspended solids	Filtration, drying	EPA-600/4-79-020	1 mg/l
Specific conductance	Wheatstone bridge	APHA et al. 1985	---
Hardness	Titrimetric, EDTA	EPA-600/4-79-020	1 mg/l
Alkalinity	Potentiometric titration	EPA-600/4-79-020	1 mg/l
<b>Chemical</b>			
Dissolved oxygen	Membrane electrode	APHA et al. 1985	---
pH	Glass electrode	APHA et al. 1985	---
Ammonia	Automated phenate	EPA-600/4-79-020	0.03 mg/l
Nitrate + Nitrite	Cadmium reduction	EPA-600/4-79-020	0.003 mg/l
Total Kjeldahl Nitrogen	Automated colorimetric	EPA-600/4-79-020	0.5 mg/l
Orthophosphate	Automated single reagent	EPA-600/4-79-020	0.01 mg/l
Total phosphorus	Persulfate digestion	EPA-600/4-79-020	0.01 mg/l
Total organic carbon	Persulfate-ultraviolet	EPA-600/4-79-020	1 mg/l
<b>Biological</b>			
Chlorophyll a	Spectrophotometric	APHA et al. 1985	---
Phytoplankton	Low magnification	APHA et al. 1985	---
Algal growth potential*	Printz Algal Assay Test	EPA 600/9-78-018	---
Fecal coliform	Membrane filter	APHA et al. 1985	---

\* Purdy Reservoir only.

Orthophosphate samples were collected by vacuum filtering 250 ml of the composited sample through 0.45 micron Millipore membrane filters and collecting the filtrate in acid-washed 250 ml Nalgene containers.

One thousand milliliters were collected from the composited photic zone sample of each station for phytoplankton identification and enumeration. Phytoplankton samples were collected during the Summer sampling session only. Each sample was placed in a 1-liter Nalgene jar containing thirty-six ml of merthiolate preservative (APHA et al. 1985). Dominant organisms will be identified to species when possible using current and standard taxonomic references. Phytoplankton data will be included as an appendix to the report at a later date.

Finally, two half-gallon portions of the composited sample were collected in plastic containers and properly preserved for laboratory analysis of water quality variables.

Subsurface grab samples were collected at each sampling site for fecal coliform analysis.

All samples were preserved, stored, and transported according to procedures in the ADEM Field Operations Division Standard Operating Procedures and Quality Control Assurance Manual Volume I Physical/Chemical (1992).

#### Algal Growth Potential Tests

Euphotic zone composite samples were also collected from the two sampling stations on Purdy Reservoir for algal growth potential tests (AGPT). Chemical analyses for low level nutrients were determined for each sample by the ADEM Central Laboratory.

Algal growth potential tests using Selenastrum capricornutum were conducted according to methodology presented in the Selenastrum capricornutum Printz Algal Assay Bottle Test (EPA-600/9-78-018) and the ADEM Algal Growth Potential Test Standard Operating Procedure (Draft 1993).

Regulated amounts of nitrogen and phosphorous were added to the processed samples to determine which was the limiting nutrient in each sample. A control of each sample was also tested to determine its algal growth potential. Algal cell counts were made on days 11-14 or until the maximum standing crop was obtained in each flask. For practical purposes, that point was defined as the day when the biomass growth was less than 5%. Cell counts were determined using an electronic particle counter (Coulter Model ZM) and a mean cell volume (MCV) computer. All cell counts were then converted to equivalent dry weights using the following data reduction equation:

$$\text{Cell counts (cells mg/l)} \times \text{MCV (cubic micrometers)} \times \\ 4.12 \times 10^{-10} = \text{mg dry weight } \underline{\text{S. capricornutum/L}}$$

The dry weight factor for this equation was developed by the Environmental Protection Agency (EPA), Ecological Support Branch, Athens, GA.

All samples were preserved, stored, and transported according to procedures in the ADEM Field Operations Division Standard Operating Procedures and Quality Control Assurance Manual Volume I Physical/Chemical (1992).

#### Fish Tissue Monitoring Programs

Sample collection and preparation is performed according to the ADEM Field Operations Division Standard Operating Procedures For Fish Sampling and Tissue Preparation For Bioaccumulative Contaminants (1991). Contaminants for which composite fish samples are analyzed and their FDA consumption advisory levels appear in Table 5. Results of the analyses of fish tissue samples are forwarded to the Alabama Department of Public Health (ADPH), the agency responsible for issuance of all fish consumption advisories in the state. If analyses of fish tissue samples finds contaminant concentrations in excess of the FDA or EPA consumption advisory levels, the ADPH typically issues one of two types of advisories:

- a) "limited consumption" advisories: women of child-bearing age and children under 15 years of age should avoid eating certain species of fish from the specified areas.
- b) "no consumption" advisories: all persons should avoid eating the certain species from the specified areas.

#### Quality Control/Quality Assurances

For quality control/quality assurance purposes, field duplicates of each sample type were collected at ten percent of the sampling sites. Field duplicates were true duplicates of the complete collection process. Blanks were collected at the same frequency as duplicates by processing distilled water through the collection and filtration equipment in the same manner as regular samples.

Measurements of temperature, dissolved oxygen, specific conductance, and pH were replicated at sampling sites where duplicate samples were collected. Quality control/quality assurance procedures used in the Fish Tissue Monitoring Program are as stated in the ADEM Standard Operating Procedures For Fish Sampling and Tissue Preparation For Bioaccumulative Contaminants.

#### Data Management and Reportings

All water quality data collected from reservoirs will be compiled and stored in STORET.

In addition to its preparation for departmental and public distribution, the ADEM Reservoir Water Quality Monitoring Program Report for 1992-1993 will be included as an addendum to the 1994 Water Quality Report to Congress.

**Table 5. Bioaccumulative contaminants with FDA consumption advisory levels generally used in the issuance of fish consumption advisories in Alabama.**

<b>Contaminant</b>	<b>Advisory Levels (ppm)</b>
<b>Polychlorinated biphenyls (PCBs)</b>	<b>2.0</b>
<b>Mercury</b>	<b>1.0</b>
<b>Chlordane (total)</b>	<b>0.3</b>
<b>Toxaphene (mixture)</b>	<b>5.0</b>
<b>Mirex</b>	<b>0.1</b>
<b>DDT (total)</b>	<b>5.0</b>
<b>Dieldrin</b>	<b>0.3</b>
<b>Endrin</b>	<b>0.3</b>
<b>Heptachlor</b>	<b>0.3</b>
<b>Chlorpyrifos (Dursban)</b>	<b>None established</b>

## RESULTS AND DISCUSSION

### Trophic Status

Trophic state classification is based on division of the trophic progression of lakes. Traditionally, the progression is divided into three classes: oligotrophic, mesotrophic, and eutrophic (Carlson 1977). Newly formed lakes, or those unimpacted by human activities, exhibit oligotrophic characteristics. Low nutrient concentrations prevent algal proliferation and algal densities remain low. Dissolved oxygen concentrations in the hypolimnions of oligotrophic lakes are usually sufficient for aquatic life. As the lake ages, nutrient inputs from point and nonpoint sources along with the internal recycling of nutrients initiates trophic progression. Algal densities increase, hypolimnetic supplies of dissolved oxygen decrease, and the trophic state of the lake advances from mesotrophic to eutrophic conditions.

Continued or increased additions of nutrients can eventually lead to hypereutrophic conditions within a lake. Hypereutrophic conditions are characterized by very dense algal populations, an epilimnion with supersaturated dissolved oxygen concentrations near the surface and critically low dissolved oxygen concentrations developing within the first few meters of depth. Hypolimnions of hypereutrophic lakes contain very little if any dissolved oxygen. The deterioration of water quality in hypereutrophic lakes impacts the aquatic vertebrate and invertebrate communities and fish kills become more likely. Use of the lakes for public water supply and recreation is also jeopardized.

Impounded lakes (reservoirs) often do not go through the classical trophic progression from oligotrophy to eutrophy that occurs in natural lakes. Newly formed lakes usually go through a relatively short period of trophic instability in which a highly productive period is followed by a decline in lake productivity. Eventually the lake settles into a less productive but more stable trophic state. Under certain conditions, however, the continuous introduction of nutrients to lakes from point and nonpoint sources prevents the typical decline in productivity and the trophic state continues to progress with an accompanying decrease in water quality.

In the RWQM Program, the ADEM uses Carlson's trophic state index (TSI) for determination of the trophic state of Alabama lakes. Carlson's TSI is useful in that it provides the limnologist and the public with a single number that serves as an indicator of a lake's trophic status. Lakes with a TSI of 70 or greater are generally considered hypereutrophic and in need of regulatory action appropriate for protection and restoration. A TSI of 50 to 70 indicates eutrophic conditions in a lake. Trophic state index values of 40-50 indicate mesotrophic conditions while oligotrophic conditions are indicated by TSI values less than 40.

Trophic state index values of Alabama lakes for 1985 and 1989-1993 appear in Table 6. Data collected through monitoring activities of the RWQM Program has enabled the ADEM to begin to establish trophic state trends for many lakes in the state. Twenty-two of the thirty-nine reservoirs monitored are considered to be eutrophic. Sixteen reservoirs are considered to be mesotrophic while only one reservoir,

Table 6. Trophic state index values of Alabama reservoirs for the Summers of 1985, and 1989-1993

Trophic State	Reservoir	Station	Year						Mean
			1985	1989	1990	1991	1992	1993	
<b>Eutrophic</b>									
	Weiss								
		Sta. 1	65	61	65	--	65	58	63
		Sta. 2	65	63	*64	--	**64	57	63
		Sta. 3	--	54	--	--	**56	59	56
		Sta. 4	--	45	--	--	--	61	53
	Neely Henry								
		Sta. 1	63	60	53	57	60	**61	59
		Sta. 2	--	59	60	60	60	--	60
	Logan Martin								
		Sta. 1	60	61	--	57	57	56	58
		Sta. 2	--	65	44	56	60	62	57
	Lay								
		Sta. 1	62	63	74	55	57	54	61
		Sta. 2	--	53	56	53	53	50	53
		Sta. 3	--	--	--	58	59	57	58
		Sta. 4	--	--	--	--	59	55	57
		Sta. 5	--	--	--	--	58	54	56
	Mitchell								
		Sta. 1	61	62	--	52	57	55	57
		Sta. 2	--	61	--	51	50	58	55
	Jordan								
		Sta. 1	56	60	55	51	58	45	54
		Sta. 2	--	56	--	47	57	53	53
	Woodruff								
		Sta. 1	--	62	*58	--	55	58	58
		Sta. 2	--	63	*56	--	58	51	57
		Sta. 3	--	--	*51	--	54	51	52
	Dannelly								
		Sta. 1	49	61	--	52	--	59	55
		Sta. 2	--	60	--	55	--	55	57
		Sta. 3	--	65	--	--	--	50	58

Table 6. (Cont.)

Trophic State	Reservoir	Station	Year						Mean
			1985	1989	1990	1991	1992	1993	
<b>Eutrophic</b>									
	Claiborne								
	West Point	Sta. 1	--	56	--	49	--	53	53
		Sta. 1	--	--	--	--	**42	--	--
		Sta. 2	--	--	--	--	**57	--	--
	Harding	Sta. 1	--	--	53	50	--	53	52
		Sta. 2	--	--	54	52	--	53	53
	W. F. George	Sta. 1	--	54	*55	--	**54	**39	51
		Sta. 2	--	60	*59	--	**58	**51	57
	Guntersville	Sta. 1	45	48	~56	~41	~52	--	48
		Sta. 2	--	46	--	--	--	--	--
		Sta. 3	--	45	--	--	--	--	--
		Sta. 4	--	46	--	--	~41	--	44
		Sta. 5	--	--	--	--	--	--	--
		Sta. 6	--	27	~37	~31	--	--	32
	Wheeler	Sta. 1	57	53	~58	~50	~46	--	53
		Sta. 2	--	57	--	--	--	--	--
		Sta. 3	--	38	--	--	~37	--	38
		Sta. 4	--	27	~41	~31	--	--	33
		Sta. 5	--	27	--	--	--	--	--
	Wilson	Sta. 1	58	59	~58	~48	~44	--	53
		Sta. 2	--	43	--	--	--	--	--
	Pickwick	Sta. 1	45	56	~52	~50	~52	--	51
		Sta. 2	--	60	~50	~46	~48	--	51
		Sta. 3	--	43	--	--	--	--	--
		Sta. 4	--	53	--	--	--	--	--

Table 6. (Cont.)

Trophic State	Reservoir	Station	Year						Mean
			1985	1989	1990	1991	1992	1993	
<b>Eutrophic</b>									
	Aliceville								
	Gainesville	Sta. 1	52	50	--	--	58	--	53
	Demopolis	Sta. 1	50	49	--	--	56	--	52
	Coffeeville	Sta. 1	47	51	--	--	57	--	52
	Warrior	Sta. 1	--	--	--	--	50	--	--
	Purdy	Sta. 1	--	--	--	--	53	--	--
		Sta. 2	--	--	--	--	54	--	--
		Sta. 1	--	--	--	--	54	--	--
		Sta. 2	--	--	--	--	56	--	--
<b>Mesotrophic</b>									
	Bear Cr.								
		Sta. 1	48	48	--	--	--	--	48
	Little Bear Cr.								
		Sta. 1	44	49	--	--	--	--	47
	Upper Bear Cr.								
		Sta. 1	52	48	--	--	--	--	50
	Cedar Creek								
		Sta. 1	27	46	--	--	--	--	37
	Gantt								
		Sta. 1	27	41	44	--	--	44	39
	Point A								
		Sta. 1	47	48	--	--	--	47	47
	Bankhead								
		Sta. 1	32	58	--	--	53	--	48

Table 6. (Cont.)

Trophic State	Reservoir	Station	Year						Mean
			1985	1989	1990	1991	1992	1993	
<b>Mesotrophic</b>									
Holt									
Lewis Smith		Sta. 1	48	46	--	--	48	--	47
		Sta. 1	39	51	41	49	--	36	43
		Sta. 2	--	45	40	45	--	39	42
		Sta. 3	41	48	40	44	--	39	42
Harris		Sta. 1	42	43	--	47	--	--	44
		Sta. 2	--	49	--	47	--	--	48
Martin		Sta. 1	37	31	*42	--	35	--	36
		Sta. 2	49	27	*46	--	38	--	40
		Sta. 3	--	--	--	--	47	--	--
		Sta. 4	--	43	--	--	47	--	45
Yates		Sta. 1	21	50	--	--	--	--	36
Thurlow		Sta. 1	18	42	--	--	--	--	30
Big Creek		Sta. 1	37	48	--	--	51	--	45
Inland		Sta. 1	41	38	--	--	--	--	40
Lake Jackson		Sta. 1	--	--	38	--	--	43	41
<b>Oligotrophic</b>									
Tuscaloosa									
		Sta. 1	32	--	37	40	--	36	36
		Sta. 2	--	--	--	45	--	35	40

\* Auburn University Key Factors Study data.

\*\*Auburn University Phase I Study data.

~ TVA Reservoir Monitoring Program data (station locations approximate those of 1985 and 1989). (TSI values from Wheeler and Guntersville may be affected by aquatic plant growth).

Tuscaloosa, had TSI values within the oligotrophic range. Values calculated for the two years of water quality data collected from Yates and Thurlow Reservoirs were highly divergent. In these cases, trophic classification was assigned by consideration of TSI values and other water quality variables including Secchi disk visibility and total phosphorous concentrations.

Using chlorophyll a concentrations to determine trophic state is considered to give the best estimate of the biotic response of lakes to nutrient enrichment when phytoplankton is the dominant plant community. Guntersville and Wheeler Reservoirs have extensive areas of aquatic macrophyte growth which may interfere with the dominance of phytoplankton in the plant community and may be responsible for the highly variable TSI values of the two reservoirs. However, both reservoirs are considered to be eutrophic.

#### Algal Growth Potential Tests

The Algal Growth Potential Test (AGPT) was developed 22 years ago as a standard, inexpensive, reproducible, and interpretable method to determine the potential of natural waters, wastewater effluent, and various compounds to support or inhibit algal growth. The assay is based on the premise that the maximum yield is proportional to the amount of the limiting nutrient present and biologically available with respect to the growth requirements of the alga. It is intended that the test be used: 1) to identify algal growth limiting constituents; 2) to determine biologically the availability of algal growth-limiting nutrients; and 3) to quantify the biological response to changes in concentrations of algal growth-limiting constituents. These measurements are made by adding the test alga to the test water and determining algal growth at appropriate intervals (Raschke and Schultz 1987).

Results of 1,230 algal growth potential tests in studies conducted throughout the southeast found the mean maximum standing crop (MSC) to be 8.50 mg dry weight/L with 71.7% of the dry weight concentrations 10 mg/l or less. An in-lake maximum concentration of 5 mg dry weight/L of the test alga Selenastrum capricornutum is a concentration that will reasonably assure protection from nuisance algal blooms and fish-kills in southeastern lakes with the exclusion of lakes in Florida (EPA 1975; Miller et al. 1974; and Vollenweider 1971).

Results of the Purdy Reservoir AGPT are listed in Table 7 and are expressed as mean Maximum Standing Crop (MSC) dry weights of Selenastrum capricornutum in mg/l. Results of analyses on the processed (autoclaved and filtered) samples are also included in Tables 7 and 8 for comparison with MSC results. All samples were determined to be phosphorous limited by the AGPT, indicating that phosphorous was the limiting nutrient to algal growth at the time of sample collection. The untreated flasks (controls) from most of the samples had MSC dry weights less than 2 mg/l except for the upper reservoir (Station 2) sample collected during August 1993 which was only slightly above 2 mg/l. All control MSC dry weights were below the 5.0 mg/l level that could create a possible nuisance algal bloom and well below the mean MSC of 8.50 mg dry weight/L determined from 1,230 southeastern AGPT studies.

Table 7. Purdy Reservoir Algal Growth Potential Tests (AGPT).

Date	Station	AGPT		Chemical Analyses	
		Mean	MSC (mg/l)	(mg/l)	
5/11/93	1	Control (C)	0.85	NH3-N	0.03
		C + Nitrogen	0.67	NO2-NO3-N	0.065
		C + Phosphorous	10.01	TSIN-N	0.095
				TKN	0.26
				Organic N	0.23
				Total N	0.325
	2			Total P	0.019
		Control (C)	1.25	NH3-N	0.02
		C + Nitrogen	1.15	NO2-NO3-N	0.12
8/24/93	1	C + Phosphorous	12.64	TSIN-N	0.14
				TKN	*
				Organic N	N/C
				Total N	N/C
				Total P	0.026
	2	Control (C)	1.59	NH3-N	*
		C + Nitrogen	1.11	NO2-NO3-N	*
		C + Phosphorous	3.12	TSIN-N	N/C
				TKN	*
				Organic N	N/C
				Total N	N/C
				Total P	0.004
		Control (C)	2.9	NH3-N	*
		C + Nitrogen	2.21	NO2-NO3-N	*
		C + Phosphorous	10.42	TSIN-N	N/C
				TKN	0.167
				Organic N	N/C
				Total N	N/C
				Total P	0.006

Maximum Standing Crop (MSC)

Not Calculable (N/C)

\* Less than detectable

### Use Support Status

The use support status of individual lakes appears in Table 8. Determinations of use support were made after review of all data collected by the RWQM Program to date. A similar table was prepared for the 1994 State Water Quality Assessments (305(b) Report). The table indicates the extent to which the surface acreage of each lake designated for a use-classification or classifications supports the specific water quality criteria for the use-classifications as described in the ADEM Chapter 335-6-10 Water Quality Criteria. Decisions on use support status were also made according to the Guidelines for Preparation of the 1994 State Water Quality Assessments (305(b) Report) where possible.

The following paragraphs contain explanatory information for lakes in Table 8 that do not fully support their uses or that fully support their uses but are considered threatened. In some cases, specific concerns exist for certain lakes that fully support their uses but are not currently considered threatened. These specific concerns are also discussed in the following paragraphs.

Weiss Reservoir fully supports its designated uses at this time but full support of its uses in the future is considered threatened because of the highly eutrophic TSI values of the reservoir (Table 6). In addition, the highest total phosphorous concentrations measured at all reservoir monitoring stations during 1992-1993 were measured in Weiss Reservoir. Continued monitoring of Weiss Reservoir is considered necessary to further document the trend of the reservoir's trophic state and water quality.

Neely Henry Reservoir is considered to fully support its Public Water Supply use classification at this time but is considered threatened because of the combination of eutrophic TSI values and violations of the dissolved oxygen standard recorded during monitoring activities and intensive surveys. Neely Henry is considered to partially support its Fish & Wildlife use classification because of violations of the dissolved oxygen standard measured during 1991 and 1992 monitoring activities and intensive surveys of the reservoir.

Lay Reservoir is considered to fully support its Public Water Supply and Swimming use classifications at this time but the uses are considered threatened because of highly eutrophic TSI values measured during 1985, 1989, and 1990. Lay Reservoir is considered to partially support its Fish & Wildlife use classification because of the measurement of dissolved oxygen concentrations in the upper end of the reservoir that were near violation of the standard during monitoring in 1992 and 1993. The measurements follow violations of the standard recorded at all three mainstem reservoir stations of Lay during August 1991.

Mitchell Reservoir is considered to partially support its Fish & Wildlife use classification because of violations of the dissolved oxygen standard recorded at the upper monitoring station of the reservoir during monitoring activities in August 1992. The violations follow others recorded at Mitchell Reservoir during August 1990 and 1991.

Jordan Reservoir fully supports its Fish & Wildlife and Swimming use classifications but is considered threatened because of the infestation of the filamentous

**Table 8**  
**USE SUPPORT STATUS OF INDIVIDUAL LAKES**  
(acres)

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Weiss	Public Water Supply	Nutrients Trophic state		21,129			
	Fish & Wildlife	Nutrients Trophic state		30,200			
	Swimming and Other Water Sports	Nutrients Trophic state		30,200			
	Fish Consum.	PCB			30,200		
Neely Henry	Public Water Supply	Nutrients Trophic state		2145			
	Fish & Wildlife	Nutrients O.E./D.O.			11,235		
	Swimming and Other Water Sports	Nutrients Trophic state		9335			
	Fish Consum.	PCB			11,235		
Logan Martin	Fish & Wildlife	None	15,263				
	Swimming and Other Water Sports	None	15,263				
	Fish Consum.	PCB			15,263		

**USE SUPPORT STATUS OF INDIVIDUAL LAKES**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Lay	Public Water Supply	Trophic state		11,142			
	Fish & Wildlife	D.O.			12,000		
	Swimming and Other Water Sports	Trophic state		10,380			
	Fish Consum.	Upstream advisory		12,000			
Mitchell	Public Water Supply	None	5850				
	Fish & Wildlife	D.O.			5850		
	Swimming and Other Water Sports	None	5850				
	Fish Consum.	None	5850				
Jordan	Fish & Wildlife	Algae		6800			
	Swimming and Other Water Sports	Algae		6800			
	Fish Consum.	None	6800				

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Lewis Smith	Public Water Supply	Mining Metals	1344				
	Fish & Wildlife	Mining Metals	21,200				
	Swimming and Other Water Sports	Mining Metals	21,200				
	Fish Consum.	Metals	21,200				
Tuscaloosa	Public Water Supply	None	5885				
	Fish & Wildlife	Mining	5885				
	Swimming and Other Water Sports	None	5885				
	Fish Consum.	---					5885
Bankhead	Public Water Supply	Mining	9345				
	Fish & Wildlife	Mining	9345				
	Swimming and Other Water Sports	Mining	9345				
	Fish Consum.	None	9345				

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Holt	Fish & Wildlife	Mining	3300				
	Swimming and Other Water Sports	Mining	3300				
	Fish Consum.	None	3300				
Warrior	Fish & Wildlife	None	7800				
	Fish Consum.	None	7800				
Demopolis	Fish & Wildlife	None	10,000				
	Swimming and Other Water Sports	None	10,000				
	Fish Consum.	None	10,000				
Harris	Fish & Wildlife	None	10,660				
	Fish Consum.	None	10,660				
Martin	Public Water Supply	None	1920				
	Fish & Wildlife	Municipal /Industrial Discharge		60			
	Swimming and Other Water Sports	Municipal /Industrial Discharge		60			
	Fish Consum.	None	39,000				

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Yates	Public Water Supply	None	1980				
	Fish & Wildlife	None	1980				
	Swimming and Other Water Sports	None	1980				
	Fish Consum.	None	1980				
Thurlow	Public Water Supply	None	585				
	Fish & Wildlife	None	585				
	Swimming and Other Water Sports	None	585				
	Fish Consum.	None	585				
Aliceville	Fish & Wildlife	None	8300				
	Swimming and Other Water Sports	None	8300				
	Fish Consum.	None	8300				

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Gainesville	Fish & Wildlife	None	6400				
	Swimming and Other Water Sports	None	6400				
	Fish Consum.	None	6400				
Woodruff	Fish & Wildlife	None	12,510				
	Swimming and Other Water Sports	None	8132				
	Fish Consum.	None	12,510				
Dannelly	Fish & Wildlife	None	17,200				
	Swimming and Other Water Sports	None	13,800				
	Fish Consum.	None	17,200				
Claiborne	Public Water Supply	None	904				
	Fish & Wildlife	None	3936				
	Swimming and Other Water Sports	None	2624				
	Fish Consum.	None	3936				
Coffeeville	Fish & Wildlife	None	8500				
	Fish Consum.	None	8500				

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Point A	Fish & Wildlife	Pesticides	900				
	Swimming and Other Water Sports	Pesticides	900				
	Fish Consum.	Pesticides					900
Gantt	Fish & Wildlife	None	2767				
	Fish Consum.	---					2767
West Point	Fish & Wildlife	Nutrients O.E./D.O.		2304			
	Swimming and Other Water Sports	Nutrients O.E./D.O.		2304			
	Fish Consump.	Chlordane				2304	
Harding	Water Supply	None	2176				
	Fish and Wildlife	None	2176				
	Swimming and Other Water Sports	None	2176				
	Fish Consump.	Chlordane				2176	
W. F. George	Fish & Wildlife	Nutrients Trophic state	12,527				
	Swimming and Other Water Sports	None	12,352				
	Fish Consum.	Upstream chlordane advisory		12,527			

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
Inland	Public Water Supply	None	1095				
	Fish & Wildlife	None	1095				
	Swimming and Other Water Sports	None	1095				
	Fish Consum.	---					1095
Purdy	Public Water Supply	None	1050				
	Fish & Wildlife	None	1050				
	Swimming and Other Water Sports	None	1050				
	Fish Consum.	---					1050
Big Creek	Public Water Supply	None	3600				
	Fish & Wildlife	None	3600				
	Fish Consum.	---					3600
Lake Jackson	Fish & Wildlife	None	256				
	Swimming and Other Water Sports	None	256				
	Fish Consum.	None	256				

**USE SUPPORT STATUS OF INDIVIDUAL LAKES (cont.)**

Reservoir	Use	Concern*	Fully Supports	Fully Supports but Threatened	Partially Supports	Does Not Support	Not Assessed
TVA	Fish & Wildlife	-----	149,700		39,180		
	Swimming and Other Water Sports	-----	89,330		1500		98,050
	Fish Consum.	-----	180,880			8000	

\* Concerns: D.O. = dissolved oxygen  
 O.E. = organic enrichment

blue-green alga, Lyngbya. The alga forms undesirable floating mats that can impede navigation and limit recreational use. Field and laboratory studies conducted by Speziale et al. (1988) indicate that Lyngbya infestations in the southeastern United States are associated with eutrophic, alkaline waters which are descriptive of conditions in Jordan Reservoir. Control measures were conducted by the Alabama Power Co. in 1992 and 1993. (personal communication Doug Powell).

Martin Reservoir fully supports its Fish & Wildlife and Swimming use classifications but 60 surface acres in the Sugar Creek/Elkahatchee Creek area of the lake are considered threatened because of the effects of municipal and industrial discharges to Sugar Creek. Effects include high chloride concentrations and damage to aesthetic qualities of the waters in the area.

West Point Reservoir is placed in the "Supports But Threatened" category of the Fish & Wildlife use classification and the Swimming use classification because of the affects of phosphorous loadings to the reservoir originating primarily from the Atlanta metropolitan area. From 1982 through 1985, the entire lake increased in productivity, with the trophic state increasing from mesotrophic conditions to one far exceeding the eutrophic threshold. A statewide ban on high phosphate laundry detergents enacted by the Georgia General Assembly in 1991 and a 0.75 mg/l phosphorous limit on major dischargers to the Chattahoochee River imposed by the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources have resulted in an estimated 50% reduction in phosphorous loading by major Atlanta area point sources between 1988 and 1990.

Uses of Lewis Smith, Tuscaloosa, Bankhead, and Holt Reservoirs are all considered to be fully supported at this time but current and past mining activities in the area remain a concern. Elevated metals concentrations were measured at Smith Reservoir during a 1986 study. A Phase I Study proposed for Smith Reservoir during 1994-1996 will further determine metals concentrations in the reservoir.

Information on the status of reservoirs of the Tennessee River can be found in the TVA Reservoir Vital Signs Monitoring Program reports for 1992 and 1993.

Vertical profile measurements and results of laboratory analyses of water quality variables used in determinations of use support status appear in Appendix A. The total phosphorous concentration measured in the forebay of Smith Reservoir during May 1993 was considered an anomaly. The concentration was not reproduced in the replicate sample and was much higher than concentrations measured at other stations of the reservoir. In some instances, sampling stations and sampling dates of Phase I Studies correspond with those of the RWQM Program. In order to prevent duplication of effort in these cases, the Phase I Study data is used as monitoring data for the RWQM Program and is designated as having been collected by Auburn University.

Data from statewide National Weather Service stations for 1992-1993 appears in Appendix B. Precipitation data is reviewed and the presence or absence of drought conditions considered in determinations of reservoir use support status. Rainfall amounts were below normal for many areas of the state from March 1 through August 31, 1992. With the exceptions of Montgomery and Huntsville, rainfall amounts were

below normal for all National Weather Service stations providing complete data for the period March 1 through August 31, 1993.

#### Fish Tissue Monitoring Program

All locations monitored during 1992-1993 appear in Table 9. Precise descriptions of all locations monitored to date appear in Appendix C. Waterbodies scheduled to be monitored during 1994-1995 include Tuscaloosa, Point A, Gantt, Inland, Purdy, and Big Creek Reservoirs.

During 1992, bioaccumulative contaminant concentrations in composite fish samples collected at all sampling locations were below FDA action levels with the exception of fish samples collected from Weiss Reservoir. Laboratory analysis of a composite sample of channel catfish collected from a sampling location on Weiss Reservoir measured PCB concentrations of 2.24 parts per million (ppm). Analysis of a channel catfish composite sample from another Weiss Reservoir sampling location found a PCB concentration of 1.97 ppm. The FDA action level for PCB contamination of fish tissue is 2.0 ppm. The ADPH instituted a "limited consumption" advisory concerning PCB contamination of catfish from Weiss, Neely Henry, and Logan Martin Reservoirs in 1989 that remains in effect.

During 1993, bioaccumulative contaminant concentrations in composite fish samples collected at all sampling locations were below FDA action levels with the exception of fish samples collected from Choccolocco Cr., a tributary of Logan Martin Reservoir. Mercury and PCB concentrations in channel catfish and largemouth bass collected in the creek exceeded the FDA action level. Results of the analyses were forwarded to the ADPH and a "no consumption" advisory issued for all species of fish within a specified area of Choccolocco Creek.

Currently there are six "no consumption" advisories and one "limited consumption" advisory in effect in the state of Alabama. Information concerning all current advisories appears in Table 10.

Table 9. Sites monitored during the ADEM Fish Tissue Monitoring Program, 1992-1993.

Waterbody	Location	Collecting Agency	Collection Date
Alabama River	ARM 67.0, upstream of AL Hwy. 12 and U.S. Hwy. 84 crossing.	ADCNR	12/15/93
Alabama River	ARM 203 to 204, downstream of Selma City Marina.	ADEM/ADCNR	11/17/93
Aliceville Reservoir	Dam forebay area at TRM 306.8.	ADEM	10/7/93
Bear Creek Reservoir	Dam forebay area.	TVA	10/15/92
Big Wills Creek	Gadsden, AL. Approx. one mile upstream of Sutton Bridge Rd.	ADEM	8/30/93
Black Creek	Gadsden, AL. Section of creek from Chestnut St. to Hickory St.	ADEM	8/31/93
Black Creek	Section of creek between Hickory St. and Black Creek embayment.	ADEM	8/31/93
Cedar Creek Reservoir	Dam forebay to one mile upstream of dam.	TVA	10/16/92
Choccolocco Creek	0.25 mile upstream and 0.75 mile downstream of Talladega Co. Rd. 399.	ADEM	8/27/93
Choccolocco Creek	Downstream of Dry Branch to 0.5 mile downstream of Southern RR crossing.	ADEM	8/26/93
Claiborne Reservoir	Dam forebay area.	ADCNR	11/30/93
Claiborne Reservoir	Vicinity of Lower Peachtree Access area.	ADCNR	1/14/94
Coffeeville Reservoir	Dam forebay area.	ADEM	10/21/93
Coffeeville Reservoir	Vicinity of Bashi Creek Public Use Area.	ADEM	10/21/93
Gadsden Lake/Black Cr.	Gadsden Lake/Black Creek embayment. North of I-759 in Gadsden.	ADEM	8/31/93
Gainesville Reservoir	Dam forebay area.	ADEM	10/5/93
Gainesville Reservoir	Vicinity of Barnes Bend Access Area.	ADEM	10/5/93
Gainesville Reservoir	Vicinity of Cochrane Recreation Area.	ADEM	10/6/93
W.F. George Reservoir	Dam forebay area.	ADCNR	10/21/93

**Table 9. Sites monitored during the ADEM Fish Tissue Monitoring Program, 1992-1993.**

Waterbody	Location	Collecting Agency	Collection Date
W.F. George Reservoir	Downstream of Cheneyhatchee and Barbour Creeks near River Mile 91.	ADCNR	10/20/93
W.F. George Reservoir	Cowkee Creek embayment, vicinity of Lakepoint Resort and State Park.	ADCNR	11/9/93
Guntersville Reservoir	TRM 350, downstream of Honeycomb Creek and upstream of dam.	TVA	10/22/92
Harding Reservoir	Halawakee Creek embayment.	ADEM	10/27/92
Harding Reservoir	Osanippa Creek embayment.	ADEM	10/28/92
Harris Reservoir	Dam forebay area.,	ADEM/ADCNR	9/29/93
Harris Reservoir	Little Tallapoosa River arm in vicinity of Randolph Co. Rd. 29.	ADEM/ADCNR	9/29/93
Holt Reservoir	Dam forebay area.	ADEM	12/3/92
Holt Reservoir	River Mile 360. Upstream of Old Lock 15 Public Access Area.	ADEM	12/4/92
Lake Jackson	Florala, AL. Lake-wide.	ADCNR	10/27/93
Frank Jackson Lake	Opp, AL. Lake-wide.	ADCNR	10/14/93
Jordan Reservoir	Dam forebay area.	ADEM	10/13/92
Jordan Reservoir	Vicinity of Shoals Creek.	ADEM	10/13/92
Lay Reservoir	Dam forebay area.	ADEM	11/3/92
Lay Reservoir	Vicinity of Peckerwood Creek.	ADEM	11/3/92
Little Bear Cr. Reservoir	Dam forebay area.	TVA	10/13/92
Logan Martin Reservoir	Dam forebay area.	ADEM	11/20/92
Logan Martin Reservoir	Riverside, near the confluence of Blue Eye Creek.	ADEM	11/20/92
Logan Martin Reservoir	Ragland, near the confluence of Aker Creek.	ADEM	11/23/92
Neely Henry Reservoir	Dam forebay area.	ADEM	11/18/92
Neely Henry Reservoir	Reservoir mile 23 to 24, near confluence with Big Wills Creek.	ADEM	11/18/92

Table 9. Sites monitored during the ADEM Fish Tissue Monitoring Program, 1992-1993.

Waterbody	Location	Collecting Agency	Collection Date
Neely Henry Reservoir	Reservoir mile 54, in vicinity of Croft Ferry.	ADCNR	12/1/92
Oliver Reservoir	Tuscaloosa, dam forebay area.	ADEM	12/2/92
Oliver Reservoir	Tuscaloosa, WRM 344.0 to 345.0.	ADEM	12/2/92
Pickwick Reservoir	TRM 230.0, 2.5 miles upstream of Second Creek.	TVA	9/16/92
Pickwick Reservoir	TRM 259.0, near Wilson Dam tailrace.	TVA	1/29/92
Pickwick Reservoir	TRM 259.0, near Wilson Dam tailrace.	TVA	9/15/92
Lewis Smith Reservoir	Ryan Creek arm, approx. 2.2 miles upstream of Big Bridge.	ADEM	10/26/93
Lewis Smith Reservoir	Rock Creek arm in vicinity of Little Crooked Creek and Rock Creek marina.	ADEM	10/26/93
Lewis Smith Reservoir	Sipsey Fork in vicinity of Clear and Butler Creeks.	ADEM	10/28/93
Thurlow Reservoir	Dam forebay area.	ADCNR	10/15/92
Upper Bear Cr. Reservoir	Dam forebay area.	TVA	10/14/92
Warrior Reservoir	Dam forebay area.	ADEM	10/13/93
Warrior Reservoir	Vicinity of Lock 8 Public Use Area. WRM 278.	ADEM	10/13/93
Weiss Reservoir	Vicinity of Leesburg Bridge.	ADCNR	11/6/92
Weiss Reservoir	Vicinity of Leesburg Bridge and dam forebay area.	ADEM	11/3/93
Weiss Reservoir	Vicinity of Cedar Bluff.	ADCNR	11/6/92
Weiss Reservoir	Vicinity of Cedar Bluff.	ADEM	11/3/93
Weiss Reservoir	Vicinity of Alabama/Georgia state line.	ADCNR	12/18/92
Weiss Reservoir	Vicinity of Alabama/Georgia state line.	ADEM	11/4/93
West Point Reservoir	Alabama portion in vicinity of Wehadkee, Stroud, and Veasey Creeks.	ADEM	9/23/93

**Table 9. Sites monitored during the ADEM Fish Tissue Monitoring Program, 1992-1993.**

<b>Waterbody</b>	<b>Location</b>	<b>Collecting Agency</b>	<b>Collection Date</b>
Wheeler Reservoir	Upstream of dam, at TRM 277.0	TVA	1/28/92
Wheeler Reservoir	Upstream of dam, at TRM 277.0	TVA	9/22/92
Wheeler Reservoir	Downstream of Bakers Creek from TRM 300.0 to 296.0.	TVA	1/30/92
Wheeler Reservoir	Downstream of Bakers Creek from TRM 300.0 to 296.0.	TVA	12/30/92
Wheeler Reservoir	Downstream of Bakers Creek from TRM 300.0 to 296.0.	TVA	1/5/93
Wilson Reservoir	Dam forebay at TRM 259.5	TVA	1/27/92
Wilson Reservoir	Dam forebay at TRM 259.5	TVA	10/7/92
Wilson Reservoir	One mile downstream of Blue Water Creek from TRM 272.0 to 274.0.	TVA	10/8/92
Yates Reservoir	Dam forebay area.	ADCNR	10/15/92

ARM = Alabama River Mile

TRM = Tennessee River Mile

WRM = Warrior River Mile

Table 10. Waterbodies Affected by Fish Consumption Restrictions

Name of Waterbody and ID No.	Waterbody Type	Size Affected	Type of Consumption Restriction				Causes of Concern	Specified Species	Date Issued
			No Consumption	General Population	Sub-population	Limited Consumption			
Weiss Reservoir	Reservoir	30,200 acres		x			PCBs	catfish > 1 lb.	5/2/89
Neely Henry Reservoir	Reservoir	11,235 acres		x			PCBs	catfish > 1 lb.	5/2/89
Logan Martin Reservoir	Reservoir	15,260 acres		x			PCBs	catfish > 1 lb.	5/2/89
West Point Reservoir	Reservoir	2,300 acres	x				Chlordane	catfish	3/6/91
Harding Reservoir	Reservoir	2,180 acres	x				Chlordane	catfish	3/6/91
Wheeler Reservoir	Reservoir	11.9 miles	x				DDT	Channel catfish	11/16/92
Indian Cr. AL/06030002-250	River & Reservoir	13 miles						Channel catfish largemouth bass smallmouth buffalo white bass	9/23/91
Huntsville Spring Br. AL/06030002-240							DDT		
Choctocco Cr. AL/03150106-270	Stream	29.7 miles	x				PCBs		11/2/93
Cold Creek Swamp AL/03160204-020	Stream & Swamp	650 acres	x				Hg	all species	5/11/92
Olin Basin AL/03160203-130	Reservoir	65 acres	x				Hg & DDT	Channel catfish largemouth bass	10/29/93

## **LITERATURE CITED**

- Alabama Department of Environmental Management (ADEM). 1989. Water quality assessment Alabama public lakes. Alabama Department of Environmental Management (ADEM), Montgomery, Alabama. 169 p.
- Alabama Department of Environmental Management (ADEM) Field Operations Division. 1992. Standard operating procedures and quality control assurance manual. Volume I. Physical/Chemical.
- Alabama Department of Environmental Management (ADEM) Field Operations Division. 1992. Standard operating procedures for fish sampling and tissue preparation for bioaccumulative contaminants.
- American Public Health Association, American Water Works Association, and Water Pollution Control Federation. 1985. Standard methods for the examination of water and wastewater, 16th ed. APHA, Washington, D.C. 1268 p.
- Carlson, R. E. 1977. A trophic state index for embayments. *Limnology and Oceanography*. 22(2): 361-369.
- Lind, O.T. 1979. Handbook of common methods in limnology. The C.V. Mosby Co., St. Louis MO. 199pp.
- Miller, W. E., T. E. Maloney, and J. C. Green. 1974. Algal productivity in 49 lake waters as determined by algal assays. *Water Research* 8:667-669.
- Raschke, R. L. 1985. Alabama lakes -- trophic classification. Ecological Support Branch, Environmental Services Division, U.S. Environmental Protection Agency, Athens, Georgia. 23 p.
- Raschke, R.L. and D.A. Schultz. 1987. The use of the algal growth potential test for data assessment. *Journal Water Pollution Control Federation*. 59(4) 222-227.
- Speziale, B.J., G. Turner, and L. Dyck. 1988. "Giant" *Lyngbya*. *Aquatics*. 10(2) 4-11.
- TVA. 1992. Reservoir vital signs monitoring - physical and chemical characteristics of water and sediment. Tennessee Valley Authority (TVA), Chattanooga, Tennessee. 132 p.
- United States Environmental Protection Agency (EPA). 1975. Model state water monitoring program. EPA-400/9-74-002.

## LITERATURE CITED

United States Environmental Protection Agency (EPA). 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. Environmental Monitoring and Support Laboratory, Cincinnati, OH. EPA-600/9-78-018.

Vollenweider, R. A. 1971. Scientific fundamentals of the eutrophication of lakes and flowing waters, with particular reference to phosphorous and nitrogen as factors in eutrophication. OEDC Technical Report DAS/CSI/68.27.

**Appendix A**

**ADEM**  
**Reservoir Water Quality Monitoring Program**  
**1992-1993**

**Vertical Profile Measurements  
and  
Results of Laboratory Analyses**

### **Key to Abbreviations**

Sta = Station  
Temp = Temperature ( C)  
DO = Dissolved oxygen (mg/l)  
Cond = Specific conductance (umhos/cm)  
Turb = Turbidity (NTU)  
Alk = Alkalinity (mg/l)  
Hard = Hardness (mg/l)  
TDS = Total dissolved solids (mg/l)  
TSS = Total suspended solids (mg/l)  
NH<sub>3</sub> = Ammonia (mg/l)  
NO<sub>3</sub>+NO<sub>2</sub> = Nitrate+Nitrite (mg/l)  
TKN = Total Kjeldahl nitrogen (mg/l)  
P total = Total phosphorous (mg/l)  
P ortho = Orthophosphate (mg/l)  
TOC = Total organic carbon (mg/l)  
CHL A = Corrected chlorophyll a (mg/m<sup>3</sup>)  
TSI = Trophic state index  
Colif = Fecal coliform (per 100 ml)

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi zone m	Depth m	Photic- zone m	Temp C	pH su	DO mg/l	Cond uhios NTU	Turb mg/l	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	NO3+ mg/l	TKN mg/l	total ortho mg/l	P ug/l	P ug/l	Chl ug/l	Colif per 100-mL	TSI	TSI	31613	85329	32211																
Aliceville	1	A	5/13/92	0.50	2.0	0.3	24.7	6.8	10.2	140.0	23.0	38.0	---	116.0	17.0	<0.030	0.056	0.310	0.072	<0.004	6.76	17.6	59	4*	---	---	---	---	---	---															
Aliceville	1	A	8/18/92	0.57	2.3	0.3	30.2	8.3	9.3	146.0	13.0	38.0	---	118.0	10.0	<0.015	0.006	0.602	0.055	<0.004	6.07	16.4	58	<2	---	---	---	---	---	---															
Bankhead**	1	A	5/27/92	1.99	8.0	0.3	24.8	8.2	9.3	227.0	1.7	49.0	---	140.0	<1.0	<0.020	<0.003	<0.150	<0.004	<0.004	<1.00	10.8	54	<2	---	---	---	---	---	---															
Bankhead**	1	B	5/27/92	2.01	8.0	0.3	25.0	8.3	9.4	227.0	1.7	48.0	---	123.0	3.0	0.050	0.470	0.502	0.021	<0.004	2.59	8.9	52	<2	---	---	---	---	---	---															
Bankhead	1	A	8/18/92	2.15	8.6	0.3	28.6	6.9	6.4	221.0	2.1	46.0	---	158.0	3.0	<0.015	0.430	0.457	0.014	<0.004	5.78	10.0	53	<2	---	---	---	---	---	---															
						1.0	28.5	7.0	5.9	221.0	1.5	28.4	7.1	5.6	222.0	5.0	28.3	7.1	5.3	222.0	10.0	28.2	7.0	4.4	225.0	13.0	27.8	6.9	2.0	238.0	14.0	27.0	6.9	0.5	252.0	15.0	27.2	6.9	0.6	249.0	20.0	24.3	7.1	0.5	273.0

\* estimated

\*\* barge traffic between replicate water samples

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	pH su	D0 mg/l	Cond µhos	Turb NTU	Hard mg/l	Rlk mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NH2 mg/l	P total			Chl per 100ml					
																	N03†	N02	N03‡	P	P	TSI			
Big Creek	1	B	5/12/92	2.60	10.4	---	24.0	5.6	9.2	26.0	1.4	8.0	---	42.0	1.0	<0.030	0.105	<0.150	0.004	<0.004	4.95	1.6	35	<2	
Big Creek	1	B	5/12/92	2.62	10.5	---	24.0	5.8	9.2	26.0	1.5	8.4	---	42.0	1.0	<0.030	0.105	<0.150	0.004	<0.004	4.13	2.3	39	<2	
Big Creek	1	B	8/19/92	2.32	9.3	---	24.0	5.9	9.0	26.0	1.0	8.5	---	42.0	1.0	<0.030	0.120	0.187	0.006	<0.004	4.13	2.3	39	<2	
Big Creek	1	B	8/19/92	2.32	9.3	---	24.0	5.9	9.0	26.0	1.5	8.5	---	42.0	1.0	<0.030	0.120	0.187	0.006	<0.004	4.13	2.3	39	<2	
Big Creek	1	B	8/19/92	2.41	9.6	---	29.3	7.3	6.5	26.0	1.0	29.3	---	42.0	1.0	<0.030	0.120	0.187	0.006	<0.004	4.13	2.3	39	<2	
Claiborne	1	A	5/4/93	0.92	3.0	---	29.5	7.3	8.1	25.0	0.3	21.1	7.4	42.0	55.0	9.0	<0.015	0.220	0.295	0.056	0.010	3.82	5.3	47	3*
Big Creek	1	B	8/19/92	2.41	9.6	---	29.5	7.4	8.3	26.0	1.0	29.2	7.4	42.0	55.0	9.0	<0.015	0.220	0.295	0.056	0.010	3.82	5.3	47	3*

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	Temp C	pH su	DO mg/l	Cond µhos NTU	Turb mg/l	Hard mg/l	Bik mg/l	NH3 mg/l	NO3+ mg/l	NO2 mg/l	TKN mg/l	P mg/l	ortho P mg/l	TOC mg/l	Chl ug/l	R mg/l	TSI per 100ml			
Claiborne	1	R	8/17/93	0.95	3.2	---	0.1	32.0	7.5	---	---	11.0	50.0	68.0	91.0	10.0	<0.015	0.036	0.472	0.033	0.031	10.90	9.9	53	7*	
Coffeeville	1	R	5/11/92	0.92	3.7	---	0.3	25.0	7.1	8.9	193.0	---	12.0	46.0	---	142.0	11.0	<0.030	0.360	0.581	0.044	0.009	10.70	6.7	49	1*
Coffeeville	1	R	8/19/92	0.78	3.1	---	0.3	31.0	7.7	7.4	243.0	---	13.0	39.0	---	162.0	9.0	<0.015	0.159	0.793	0.030	0.009	7.33	7.6	50	<2
Donnelly	1	R	5/4/93	0.78	2.8	---	0.1	22.2	7.5	9.2	104.0	---	8.9	40.0	56.0	94.0	9.0	<0.015	0.220	0.326	0.048	0.004	5.65	5.7	48	1*
Donnelly	1	R	8/17/93	1.14	3.5	---	0.1	34.4	8.5	9.4	136.0	---	8.0	50.0	74.0	91.0	7.0	<0.015	0.040	0.988	0.045	0.009	4.19	18.1	59	3*

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	pH su	Temp C	D0 mg/l	Cond NTU	Turb mg/l	Alk mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	TKN mg/l	P ug/l	P ug/l	Total ortho TOC mg/l	Chl ug/l	TSI per 100ml	00650	00660	00680	32211	85329	31613										
Donnelly	2	A	5/4/93	1.14	4.5	0.1	22.2	7.5	9.6	105.0	5.6	41.0	53.0	96.0	8.0	<0.015	0.230	<0.150	0.052	0.004	4.25	8.0	51	48*														
Donnelly	2	A	8/17/93	1.02	2.7	0.1	35.0	8.7	11.0	135.0	5.8	136.0	5.5	135.0	9.0	51.0	68.0	110.0	12.0	<0.015	0.160	0.949	0.038	0.019	4.35	12.1	55	<1										
Donnelly	3	A	5/4/93	1.26	4.7	0.1	21.1	7.5	9.5	113.0	5.8	136.0	5.5	135.0	5.0	44.0	60.0	96.0	8.0	<0.015	0.230	<0.150	0.041	<0.004	3.69	10.3	53	2*										
Donnelly	3	A	8/18/93	0.83	2.8	0.1	30.2	7.2	6.0	132.0	5.7	131.0	5.7	131.0	11.0	49.0	65.0	85.0	10.0	<0.015	0.190	0.993	0.040	0.017	4.57	7.1	50	6*										
Demopolis	1	A	5/20/92	0.96	3.8	0.3	27.3	7.8	9.3	197.0	10.0	271.0	8.2	287.0	1.0	30.7	8.2	8.2	1.5	30.3	7.8	6.9	289.0	5.0	30.0	7.5	6.0	293.0	10.0	30.0	7.5	5.9	290.0	15.0	29.9	7.5	5.6	270.0
Demopolis	1	A	8/17/92	0.54	2.2	0.3	32.2	8.7	10.0	271.0	8.3	57.0	—	—	13.0	42.0	—	112.0	7.0	0.080	0.280	0.722	0.029	<0.004	5.68	5.2	47	1*										

\* estimated

\*\* barge traffic between replicate water samples

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Temp C	pH su	D0 mg/l	Cond umhos NTU	Turb mg/l	Bk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	NO3+ mg/l	P mg/l	Total P mg/l	Ortho P mg/l	TKN mg/l	Chi ug/l	TSI per 100ml	Colif ----																																				
Gainesville	1	A	5/13/92	0.54	2.2	0.3	23.5	5.7	8.3	129.0	---	20.0	30.0	---	108.0	15.0	<0.030	0.180	3.020	0.090	<0.004	7.79	9.2	52	3x																																			
Gainesville	1	A	8/18/92	0.60	2.4	0.3	29.5	7.6	8.3	153.0	---	15.0	41.0	---	126.0	9.0	<0.015	0.046	0.692	0.045	<0.004	6.84	13.5	56	<2																																			
Gantt	1	A	4/29/93	0.76	1.93	0.3	29.1	7.4	7.3	153.0	1.5	29.0	7.3	6.8	153.0	5.0	29.0	7.3	6.5	154.0	10.0	28.9	7.3	6.5	150.0	12.0	28.9	7.3	6.3	152.0																														
Gantt	1	A	8/11/93	1.88	2.8	0.3	31.4	7.3	7.3	72.0	1.0	21.8	6.9	8.0	56.0	1.5	21.7	6.9	7.9	56.0	2.0	21.6	6.9	7.9	56.0	5.0	20.6	6.9	7.2	55.0	8.0	19.5	6.7	6.4	55.0																									
Harding	1	A	5/11/93	1.92	5.9	0.3	31.4	7.3	7.3	72.0	1.0	30.9	7.3	7.2	71.0	1.5	30.4	7.3	7.2	71.0	2.0	30.3	6.9	7.0	73.0	3.0	29.9	6.8	5.4	70.0	4.0	29.4	6.7	4.3	69.0	5.0	29.2	6.7	3.7	75.0	6.0	28.8	6.5	1.4	73.0	7.0	28.1	6.6	0.1	94.0	9.0	25.7	6.8	0.1	116.0					
Harding	1	A	5/11/93	1.92	5.9	0.3	22.9	8.3	11.1	60.0	1.0	22.3	8.5	11.1	60.0	1.5	21.8	8.2	10.9	60.0	2.0	21.4	7.8	10.3	59.0	3.0	20.8	7.4	9.3	60.0	5.0	20.1	7.1	9.0	61.0	11.0	19.0	6.8	8.1	59.0	15.0	18.3	6.8	7.6	59.0	20.0	17.0	6.6	6.0	59.0	25.0	15.4	6.5	4.0	61.0	29.0	14.7	6.5	2.9	63.0

\* estimated

\*\* barge traffic between replicate water samples

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Stn	Rep	Date	Secchi m	Depth m	Photic- zone m	pH su	D0 mg/l	Cond µTU	Turb mg/l	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	TKN mg/l	P mg/l	Total ortho P mg/l	Chl ug/l	TSI per 100ml	Colif -----	31613					
Harding	1	A	8/23/93	1.92	7.7	0.1	30.5	8.6	8.9	77.0	8.6	9.1	76.0	2.3	22.0	37.0	44.0	3.0	<0.015	0.016	0.448	0.016 <0.004	4.80	9.9	53 <1			
						1.0	30.0	8.6	9.1	76.0	8.5	8.9	76.0	1.5	29.9	8.5	8.9	76.0	1.0	29.7	8.4	8.6	76.0	1.0	29.2	8.0	8.2	76.0
						2.0	29.7	8.4	8.6	76.0	8.4	8.6	76.0	4.0	29.2	8.0	8.2	76.0	5.0	28.7	6.9	6.2	79.0	6.0	28.4	6.5	4.6	81.0
						7.0	28.3	6.5	4.2	80.0	6.5	4.2	80.0	8.0	28.2	6.4	3.9	77.0	9.0	28.0	6.4	3.4	74.0	10.0	27.9	6.3	2.3	83.0
						11.0	27.9	6.2	1.6	66.0	6.2	1.2	71.0	13.0	27.7	6.2	1.2	71.0	14.0	27.5	6.2	0.8	78.0	15.0	27.3	6.2	0.3	72.0
						20.0	23.4	6.4	0.0	79.0	6.4	0.0	79.0	25.0	17.8	6.8	0.0	115.0	28.0	16.9	7.1	0.0	122.0	28.0	16.9	7.1	0.0	122.0
Harding	2	A	5/11/93	1.88	6.4	0.1	24.1	8.6	11.5	59.0	-----	-----	-----	3.7	18.0	31.0	61.0	2.0	<0.015	0.410	0.161	0.028	0.009	2.13	6.9	50 1*		
						1.0	23.3	8.7	11.5	59.0	8.7	11.5	59.0	1.5	21.8	8.5	11.4	60.0	2.0	21.5	8.3	10.5	60.0	3.0	20.7	7.7	9.7	61.0
						5.0	20.2	7.3	9.1	61.0	7.3	9.1	61.0	7.0	19.8	6.9	8.8	61.0	9.0	19.4	6.8	8.2	60.0	11.0	17.8	6.9	5.7	56.0
						13.0	17.4	6.7	3.8	57.0	6.7	3.8	57.0	13.0	17.4	6.7	3.8	57.0	1.0	20.9	8.1	8.7	76.0	1.5	23.2	7.9	7.5	77.0
Harding	2	A	8/23/93	1.78	5.6	0.1	30.9	8.1	8.7	76.0	-----	-----	-----	3.0	21.0	40.0	51.0	3.0	<0.015	0.007	<0.150	0.010	<0.004	3.45	9.9	53 2*		
						1.0	29.5	8.3	9.0	78.0	8.3	9.0	78.0	2.0	29.1	7.7	8.4	77.0	3.0	29.0	7.2	6.6	78.0	5.0	28.7	6.8	6.1	79.0
						7.0	28.6	6.8	6.1	79.0	6.8	6.1	79.0	8.0	28.4	6.7	5.5	79.0	9.0	28.3	6.5	3.4	78.0	10.0	27.9	6.2	1.0	76.0
						11.0	27.4	6.3	0.4	73.0	6.3	0.4	73.0	13.0	26.2	6.6	0.3	101.0	13.0	26.2	6.6	0.3	101.0	13.0	26.2	6.6	0.3	101.0

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Site	Rep	Date	Secchi H	Photic- zone H	Depth m	Temp C	pH su	D0 mg/l	Cod mg/l	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	NH3 mg/l	N03+ mg/l	P mg/l	total ortho P mg/l	TOC mg/l	Chl ug/l	TSI per 100ml	
Holt	1	A	5/28/92	2.86	11.4	0.3	23.8	7.1	---	---	9.6	243.0	2.2	46.0	---	171.0	<1.0	0.050	0.520	0.308	<0.004 1.34	4.7
Holt	1	A	8/18/92	2.48	9.9	0.3	29.0	6.9	---	---	5.7	276.0	1.8	55.0	---	195.0	2.0	0.960	0.230	0.499	0.006 <0.004 6.18	5.7
Inland	1	A	5/19/92	4.54	18.2	0.3	25.5	6.3	8.7	92.0	1.2	14.0	---	62.0	<1.0	0.070	0.590	0.632	0.006 <0.004 3.68	1.1		
Inland	1	A	8/19/92	4.20	16.8	0.3	27.2	6.5	7.9	92.0	1.6	12.0	---	88.0	<1.0	<0.015	0.530	0.470	<0.004 <0.004 2.59	0.0		
F. Jackson	1	A	4/28/93	1.10	3.2	0.3	21.9	6.3	9.0	---	10.0	40.0	31.0	1.0	<0.015	0.154	0.540	0.027 <0.004 5.00	7.9	51 2x		
						1.0	21.7	6.4	8.8	28.0	1.5	21.5	6.5	8.8	27.0	2.0	21.4	6.5	8.7	28.0		
						3.0	21.3	6.5	8.5	27.0	4.0	20.9	6.4	8.1	26.0	5.0	20.9	6.4	7.5	27.0		
						6.0	18.2	6.0	3.5	32.0												

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	pH su	Dissolved Oxygen mg/l	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO3-N mg/l	TKN mg/l	Total Ortho P mg/l	Chl ug/l	TOC mg/l	R mg/l	TSI per 100ml	Colif ----			
F-Jackson	1	A	8/10/93	1.39	1.9	0.1	30.2	6.1	6.4	33.0	4.6	12.0	35.0	39.0	2.0	<0.015	0.110	1.360	0.022 <0.004	5.46	4.8	46	1*	
Jackson	1	A	4/28/93	3.25+	3.8+	0.1	22.8	6.4	9.3	22.0	----	0.8	6.0	41.0	17.0	<1.0	<0.015	0.016	0.510	0.009 <0.004	3.74	0.7	27	<1
Jackson	1	A	8/10/93	3.87	4.0+	0.1	30.8	6.4	7.0	23.0	----	2.6	9.0	30.0	27.0	5.0	<0.015	0.130 <0.150	0.015 <0.004	4.34	3.5	43	1*	
Jordan	1	A	5/5/92	1.57	6.3	0.3	23.5	8.7	10.7	114.0	----	1.8	45.0	----	62.0	4.0	<0.030	0.032	0.486	0.023 0.005	7.14	7.2	50	<2
Jordan	1	A	5/3/93	1.34	4.3	0.3	18.8	7.0	7.7	107.0	----	4.5	42.0	64.0	67.0	4.0	<0.015	0.120	0.495	0.039 0.014	5.57	1.5	35	2*

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	Temp C	pH su	D0 mg/l	Cond umhos	Turb mg/l	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	TRN mg/l	P mg/l	total ortho P mg/l	TOC mg/l	Chi ug/l	TSI per 100ml			
Jordan	1	A	8/11/92	1.69	6.8	---	0.3	32.2	8.9	9.3	162.0	---	2.3	63.0	---	95.0	13.0	<0.015	<0.003	0.298	0.027	<0.004	7.96	17.2	58	<2
Jordan	1	A	8/16/93	3.17	6.4	---	0.3	30.6	7.9	8.2	152.0	---	2.2	60.0	76.0	97.0	4.0	<0.015	0.009	0.677	0.014	0.012	3.26	4.5	45	2*
Jordan	2	A	5/5/92	0.96	3.8	---	0.3	21.9	8.0	10.3	115.0	---	3.3	47.0	---	69.0	7.0	<0.030	0.120	0.291	0.023	0.007	5.17	12.1	55	<2
Jordan	2	A	5/3/93	1.26	3.3	---	0.3	19.2	7.0	7.8	105.0	---	5.5	41.0	66.0	89.0	6.0	<0.015	0.160	0.596	0.046	0.016	4.41	5.1	47	2*
Jordan	2	A	8/11/92	1.5	6.0	---	0.3	31.5	8.5	9.0	169.0	---	2.4	65.0	---	102.0	13.0	<0.015	0.027	0.720	0.029	<0.004	8.50	15.6	58	<2

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Photic- zone	Temp C	DO mg/l	Cond uhohs	Turb NTU	Blk mg/l	Hard mg/l	TDS mg/l	NH3 mg/l	TKN mg/l	total mg/l	ortho mg/l	TOC mg/l	Chl ug/l	TSI per 100ml	Colif per 100ml	
Jordan	2	B	8/11/92	1.5	6.0	---	0.3	31.2	8.2	8.2	166.0	---	2.7	65.0	---	113.0	14.0	<0.017	0.015	7.36	12.4	55
Jordan	2	A	8/16/93	1.5	3.9	---	0.3	30.2	7.6	7.4	157.0	---	3.3	61.0	80.0	95.0	5.0	<0.015	0.015	0.986	0.0222	<0.004
Lay	1	A	5/6/92	1.69	6.8	---	0.3	21.3	7.4	9.6	123.0	---	2.1	51.0	---	71.0	6.0	0.717	0.013	<0.150	0.023	<0.004
Lay	1	A	5/4/93	1.18	3.2	---	0.3	20.6	7.2	7.3	132.0	---	5.7	51.0	71.0	106.0	8.0	<0.015	0.150	0.818	0.048	0.007

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi H	Depth m	Temp C	pH su	D0 mg/l	Cond µhos	Turb NTU	Hard mg/l	TSS mg/l	NH3 mg/l	NO3+ mg/l	TKN mg/l	P mg/l	P mg/l	Chl per 100ml	Colif	TSI	per		
Lay	1	B	5/4/93	1.10	3.0	20.9	7.2	7.4	132.0	7.2	132.0	5.3	52.0	70.0	103.0	6.0	<0.015	0.160	0.493	0.055	<0.004	4.12	5.7
Lay	1	A	8/12/92	1.58	6.3	31.1	8.6	8.6	176.0	8.2	176.0	1.9	67.0	---	97.0	3.0	<0.015	<0.003	1.087	0.029	<0.004	11.60	14.8
Lay	1	A	8/17/93	1.72	5.1	32.0	8.1	7.9	174.0	8.1	174.0	1.5	68.0	85.0	106.0	4.0	<0.015	0.015	1.120	0.032	0.019	4.43	10.5
Lay	2	A	5/6/92	0.86	3.4	22.0	7.4	7.2	178.0	7.1	177.0	7.3	63.0	---	97.0	13.0	<0.030	0.170	0.635	0.052	0.017	7.57	5.6
Lay	2	A	5/4/93	1.02	2.2	19.7	7.1	7.9	137.0	7.1	136.0	5.2	55.0	73.0	122.0	9.0	<0.015	0.160	0.241	0.033	0.008	3.39	8.1
						19.7	7.1	7.2	136.0	7.1	137.0	1.5	51	---									
						19.7	7.1	7.0	137.0	7.1	137.0	2.0	51	---									
						19.7	7.1	7.0	137.0	7.1	137.0	3.0	51	---									
						19.6	7.1	6.8	136.0	7.1	137.0	4.0	51	---									
						19.6	7.1	6.8	138.0	7.1	137.0	4.6	51	---									

x estimated  
xx barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Temp °C	pH su	Cond mg/l	Turb NTU	Alk mg/l	TDS mg/l	NH3 mg/l	NH3 mg/l	TKN mg/l	P mg/l	ortho P mg/l	Chl ug/l	Colif per 100ml												
Lay	2	R	8/12/92	0.95	3.8	0.3	31.5	7.5	5.0	187.0	8.5	69.0	---	113.0	11.0	<0.015	0.070	0.087	<0.014	11.70	9.7	53	1x							
Lay	2	R	8/17/93	1.60	2.1	0.3	32.7	7.2	6.2	190.0	7.1	72.0	85.0	119.0	9.0	<0.015	0.194	0.953	0.065	0.018	4.64	7.3	50	9x						
Lay	3	R	5/6/92	1.22	4.9	0.3	32.1	7.2	4.9	191.0	2.0	32.0	7.2	4.9	191.0	3.0	31.9	7.2	4.8	191.0	4.0	31.9	7.2	4.7	192.0	5.0	31.9	7.2	4.7	191.0
Lay	3	R	5/4/93	0.99	3.0	0.3	21.0	8.0	9.3	141.0	4.6	59.0	---	69.0	7.0	<0.030	0.014	0.491	0.025	0.005	5.22	12.9	56	<2						
Lay	3	R	8/12/92	1.15	4.6	0.3	20.9	7.3	7.8	139.0	5.7	53.0	74.0	102.0	9.0	<0.015	0.180	0.216	0.047	0.004	4.79	8.7	52	---						
Lay	3	R	8/12/92	1.15	4.6	0.3	32.7	8.5	8.5	183.0	3.7	66.0	---	120.0	7.0	0.510	<0.003	1.118	0.042	<0.004	6.05	18.7	59	<2						

\* estimated  
xx barge traffic between replicate water samples

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Photic- zone m	Temp C	pH su	DQ mg/l	Cond µg/l	Turb NTU	Alk mg/l	Hard mg/l	NH3 mg/l	TSS mg/l	TKN mg/l	Total ortho P mg/l	P mg/l	TOC mg/l	P mg/l	Chl ug/l	TSI 100ml	Colif Per 100ml		
Lay	3	A	8/17/93	1.2	3.3	---	33.2	8.4	10.0	187.0	3.4	75.0	92.0	2.0	<0.015	0.010	0.876	0.031	<0.004	5.40	15.2	57	<1		
Lay	4	A	5/6/92	1.34	5.4	---	21.5	8.3	9.5	134.0	---	4.0	54.0	---	68.0	7.0	<0.030	0.003	0.920	0.026	0.005	7.40	8.5	52	<2
Lay	4	A	5/4/93	1.00	3.2	---	21.3	7.7	8.6	132.0	---	4.8	52.0	72.0	108.0	9.0	<0.015	0.120	0.333	0.044	<0.004	4.36	8.3	51	---
Lay	4	A	8/12/92	1.19	4.8	---	21.3	7.7	8.5	131.0	---	4.0	54.0	---	68.0	7.0	<0.030	0.003	0.920	0.026	0.005	7.40	8.5	52	<2
Lay	4	A	8/17/93	1.45	3.3	---	32.2	8.9	9.0	171.0	---	3.9	66.0	---	109.0	10.0	0.960	<0.003	1.335	0.039	<0.004	6.90	17.9	59	<2
Lay	4	A	5/4/92	1.49	3.3	---	31.7	8.5	9.3	183.0	---	2.4	73.0	89.0	118.0	7.0	<0.015	0.008	1.300	0.047	0.008	4.47	11.9	55	<1

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Site	Rep	Date	Secchi m	Photic- zone m	Depth m	Temp C	pH su	DQ mg/l	Cond umhos	Turb NTU	Hard mg/l	TSS mg/l	NH3 mg/l	TKN mg/l	Total mg/l	Ortho mg/l	TOC mg/l	Chl ug/l	P per 100ml	Colif																									
Lay	5	A	5/6/92	1.01	4.0	0.3	21.1	7.9	8.7	143.0	6.2	55.0	---	67.0	10.0	<0.030	0.008	0.703	0.026	0.005	6.64	10.5	54	3x																						
Lay	5	A	5/10/93	0.83	2.9	0.1	21.8	7.7	8.8	138.0	5.2	56.0	78.0	103.0	7.0	<0.015	0.100	0.367	0.030	<0.004	4.17	10.3	53	---																						
Lay	5	A	8/12/92	1.07	4.3	0.3	31.0	8.5	8.5	180.0	4.5	68.0	---	108.0	5.0	<0.015	0.003	0.958	0.037	<0.004	11.04	17.1	58	5																						
Lay	5	A	8/17/93	1.15	3.5	1.0	31.0	8.6	8.5	181.0	1.5	31.0	8.5	8.3	182.0	2.0	30.4	7.9	5.9	183.0	3.0	29.9	7.4	2.5	183.0	4.0	29.8	7.3	1.7	184.0	4.9	5														
Logan Martin 1	A	5/7/92	1.40	5.6	---	0.3	32.6	8.5	9.9	186.0	4.6	74.0	92.0	109.0	9.0	<0.015	0.013	0.957	0.040	<0.004	5.79	10.7	54	<1																						
Logan Martin 1	A	5/5/93	1.32	4.3	---	1.0	31.8	8.5	9.4	186.0	1.5	31.2	8.3	8.2	184.0	2.0	31.1	8.2	8.0	183.0	3.0	30.6	8.0	6.4	183.0	4.0	29.5	7.4	1.5	182.0	4.0	5														
Logan Martin 1	A	5/5/93	1.40	5.6	---	0.3	19.5	7.4	8.4	128.0	4.2	52.0	---	62.0	5.0	<0.030	0.013	1.100	0.026	0.007	6.23	8.4	51	<2																						
						0.1	21.6	7.6	8.2	127.0	1.0	20.4	7.6	8.0	127.0	1.5	20.2	7.5	7.9	125.0	2.0	20.1	7.5	7.8	127.0	5.0	19.5	7.2	6.9	127.0	10.0	19.3	7.1	6.6	130.0	15.0	19.3	7.1	6.4	127.0	20.0	19.1	7.0	5.9	131.0	5.9

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi H	Photic- zone H	Depth m	Temp C	pH su	DO mg/l	Cond umhos	Turb NTU	Alk mg/l	TDS mg/l	NH3 mg/l	NH4+ mg/l	TKN mg/l	P mg/l	Total ortho-P mg/l	TOC mg/l	Chl ug/l	TSI per 100ml				
Logan Martin 1	A	8/13/92	1.78	7.1	---	0.3	29.4	8.6	7.6	150.0	2.6	60.0	---	103.0	3.0	<0.015	0.003	0.623	0.026	<0.004	6.29	15.1	57	<2	
Logan Martin 1	B	8/13/92	1.76	7.0	---	0.3	29.4	8.6	7.2	152.0	---	2.2	61.0	---	97.0	2.0	<0.015	<0.003	0.375	0.028	<0.004	6.08	16.3	58	<2
Logan Martin 1	A	8/18/93	1.6	4.9	---	0.3	30.4	8.5	8.7	157.0	---	2.2	66.0	87.0	91.0	4.0	<0.015	0.005	0.666	0.041	0.019	3.66	13.8	56	<1
Logan Martin 1	B	8/18/93	1.6	4.9	---	0.3	30.4	8.5	8.7	157.0	1.0	30.4	8.5	8.7	157.0	1.5	30.3	8.4	8.5	157.0	2.0	30.0	8.2	8.0	157.0
Logan Martin 1	C	8/18/93	1.6	4.9	---	0.3	30.4	8.5	8.7	157.0	3.0	29.6	7.6	5.6	158.0	4.0	29.3	7.4	4.2	158.0	5.0	29.2	7.2	3.0	158.0
Logan Martin 1	D	8/18/93	1.6	4.9	---	0.3	30.4	8.5	8.7	157.0	6.0	29.1	7.1	2.3	158.0	7.0	29.0	7.1	1.4	159.0	10.0	28.8	7.0	0.4	162.0
Logan Martin 1	E	8/18/93	1.6	4.9	---	0.3	30.4	8.5	8.7	157.0	15.0	28.5	7.0	0.4	173.0	20.0	28.0	7.0	0.4	188.0	20.0	28.0	7.0	0.4	188.0
Logan Martin 2	A	5/05/93	0.76	3.0	---	0.3	19.6	7.5	8.3	134.0	1.0	19.7	7.5	8.2	134.0	1.5	19.7	7.5	8.2	134.0	4.0	19.7	7.6	8.1	134.0
Logan Martin 2	B	5/05/93	0.77	2.7	---	0.3	21.1	7.5	8.2	123.0	1.0	20.6	7.4	7.8	122.0	1.5	20.1	7.4	7.6	121.0	2.0	19.9	7.3	7.5	123.0
Logan Martin 2	C	5/05/93	0.77	2.7	---	0.3	21.1	7.5	8.2	123.0	6.0	19.8	7.5	8.1	134.0	8.0	19.8	7.5	7.9	134.0	10.0	19.8	7.7	7.7	134.0
Logan Martin 2	D	5/05/93	0.77	2.7	---	0.3	21.1	7.5	8.2	123.0	10.0	19.8	7.7	7.7	134.0	10.0	19.8	7.7	7.7	134.0	10.0	19.8	7.7	7.7	134.0

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992-1993

Reservoir	Sta	Rep	Date	Photic-			Temp	pH	DO	Cond	Turb	Hrd	Alk	TDS	TKN	NH3	NO2	P	total	ortho	TOC	Chi	R	TSI	per	100ml
				n	m	h																				
Logan Martin 2	R	8/13/92	0.54	2.2	---	---	0.3	29.2	7.7	5.8	151.0	---	64.0	---	116.0	18.0	<0.015	0.004	0.435	0.054	<0.004	8.14	19.6	60	3*	
Logan Martin 2	R	8/18/93	0.87	2.5	---	---	0.3	31.2	8.1	7.9	169.0	---	6.4	73.0	87.0	105.0	11.0	<0.015	0.008	0.940	0.053	<0.004	3.74	24.4	62	<1
Martin	1	R	4/30/92	4.16	16.6	---	0.3	21.2	7.1	9.4	39.0	---	1.0	16.0	---	49.0	1.0	<0.030	0.210	0.161	0.009	<0.004	2.29	1.1	32	<2
Martin	1	R	8/12/92	4.49	18.0	---	0.3	30.8	7.6	7.6	39.0	---	1.7	13.0	---	42.0	1.0	<0.015	0.113	0.212	0.012	<0.004	3.92	1.5	35	<3
Martin	2	R	4/30/92	3.05	12.2	---	0.3	20.8	7.1	9.3	36.0	---	2.0	15.0	---	54.0	2.0	<0.030	0.200	<0.150	0.015	0.008	2.28	1.6	35	<2

\* estimated  
\*\* barge traffic between replicate water samples

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone	Depth m	Temp C	pH su	DO mg/l	Cond umhos	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	TKN mg/l	total ortho P mg/l	P mg/l	Chl ug/l	TSI per 100ml	Colif			
Martin	2	A	8/12/92	3.95	15.8	---	0.3	31.1	7.8	7.7	39.0	1.9	10.0	---	39.0	2.0	<0.015	0.083	0.488	0.008	<0.004	3.73	2.1	38	<3	
Martin	3	A	4/30/92	4.20	16.8	---	0.3	20.4	7.0	9.5	38.0	1.0	15.0	---	47.0	1.0	<0.030	0.160	0.323	0.004	<0.004	2.38	0.4	22	<2	
Martin	3	A	8/12/92	5.01	20.0	---	0.3	30.4	6.5	7.4	39.0	2.0	12.0	---	43.0	2.0	<0.015	0.052	0.259	<0.004	<0.004	3.35	1.7	36	<3	
Martin	4	A	4/30/92	1.95	7.8	---	0.3	20.0	7.6	10.1	37.0	1.0	20.0	7.7	10.0	37.0	1.5	19.8	7.7	9.9	38.0	2.0	18.5	7.7	9.9	38.0

\* estimated traffic between replicate water samples  
\*\* barge traffic during Phase I Studies.  
n data collected by Huburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	000078	Photic-	000100	004100	003000	00095	82078	00410	00900	00515	00530	00610	00620	00625	00650	00660	00680	32211	85329	31613																											
				Secchi m	zone m	Depth m	pH su	D0 mg/l	Cond µhos NTU	Turb mg/l	Alk mg/l	TDS mg/l	NH3 mg/l	NO2 mg/l	TKN mg/l	P mg/l	Chl ug/l	TSI R	TSI mg/l	Per 100ml																														
Martin	4	A	8/12/92	2.28	9.1	0.3	31.3	8.5	8.3	43.0	4.2	13.0	---	39.0	5.0	<0.015	0.031	0.170	0.019	<0.004	4.11	5.6	47	<3																										
Mitchell	1	A	5/25/92	1.84	7.4	0.3	22.7	8.4	10.3	120.0	2.0	47.0	---	70.0	4.0	<0.030	0.033	0.744	0.024	0.005	5.12	9.2	52	<2																										
Mitchell	1	B	5/25/92	1.83	7.3	0.3	22.6	8.5	10.5	121.0	---	---	---	---	---	4.8	45.0	69.0	95.0	<0.015	0.150	0.418	0.015	0.012	3.50	4.5	45	<1																						
Mitchell	1	A	5/3/93	1.34	3.3	---	19.2	7.0	7.8	118.0	1.0	19.2	7.0	7.6	118.0	1.5	19.2	7.0	7.5	118.0	2.0	19.2	7.0	7.5	118.0	5.0	19.1	7.0	7.4	118.0	10.0	19.1	7.0	7.3	118.0	15.0	18.7	6.9	6.5	107.0	20.0	18.7	6.8	6.4	116.0	23.5	18.7	6.8	6.4	111.0

\* estimated  
\*\* barge traffic between replicate water samples  
n date collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Photic zone	pH su	D0 mg/l	Cord NTU	Turb mg/l	Alk mg/l	Hard mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	N03† mg/l	P mg/l	Total TKN mg/l	ortho P mg/l	TOC mg/l	Chl ug/l	TSI per 100ml	Colif					
Mitchell	1	A	8/11/92	1.56	6.2	---	0.3	31.6	8.8	9.6	173.0	173.0	104.0	13.0	<0.015	<0.003	<0.150	0.035	<0.004	10.10	14.8	57	<2					
Mitchell	1	A	8/16/93	1.84	5.9	---	0.3	31.5	8.3	8.2	164.0	164.0	61.0	93.0	4.0	<0.015	0.007	0.215	0.027	0.007	4.86	12.0	55	<1				
Mitchell	2	B	5/5/92	1.31	5.2	---	0.3	31.6	8.3	8.2	163.0	163.0	61.0	93.0	4.0	<0.015	0.007	0.215	0.027	0.007	4.86	12.0	55	<2				
Mitchell	2	B	5/3/93	1.16	3.1	---	0.3	31.6	8.3	8.2	164.0	164.0	61.0	93.0	4.0	<0.015	0.007	0.215	0.027	0.007	4.86	12.0	55	<2				
Mitchell	2	A	5/16/93	1.26	5.0	---	0.3	20.3	7.3	8.4	123.0	123.0	61.0	6.0	<0.030	0.130	0.575	0.029	0.008	3.78	6.8	49	<2					
Mitchell	2	A	5/3/93	1.16	3.1	---	0.3	19.5	7.1	7.4	128.0	128.0	50.0	7.3	5.7	49.0	72.0	39.0	8.0	<0.015	0.170	0.477	0.060	0.015	3.57	5.3	47	6*

\* estimated

 \*\* barge traffic between replicate water samples  
 \*\* data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone	Depth m	Temp C	pH su	DO mg/l	Cond umhos	Turb NTU	Hard mg/l	Alk mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	TKN mg/l	00650 00660 00680 32211 85329 31613							
																			P ug/l	total Chl ug/l	ortho Chl ug/l	TOC mg/l	A ug/l	TSI per 100ml		
Mitchell	2	A	8/11/92	1.69	6.8	0.3	31.0	7.4	5.3	177.0	2.8	69.0	---	112.0	12.0	<0.015	0.069	<0.150	0.042	0.009	9.93	7.5	50	2*		
Mitchell	2	A	8/16/93	1.58	4.3	0.3	31.1	7.9	8.0	170.0	---	---	1.3	65.0	84.0	102.0	7.0	<0.015	0.018	<0.150	0.032	<0.004	4.17	18.4	59	3*
Mitchell	2	B	8/16/93	1.60	4.2	0.3	31.2	8.0	8.0	170.0	1.0	31.0	8.0	8.2	170.0	1.5	30.8	8.1	8.5	170.0	2.0	30.7	8.1	8.3	169.0	
Mitchell	2	B	8/16/93	1.60	4.2	0.3	31.2	8.0	8.0	170.0	2.0	30.2	7.9	7.1	170.0	3.0	30.2	7.9	7.1	170.0	4.0	29.8	7.6	6.0	170.0	
Mitchell	2	B	8/16/93	1.60	4.2	0.3	31.2	8.0	8.0	170.0	6.0	29.7	7.4	5.2	170.0	8.0	29.7	7.3	4.8	170.0	10.0	29.4	7.3	4.0	170.0	
Mitchell	2	B	8/16/93	1.60	4.2	0.3	31.2	8.0	8.0	170.0	12.0	29.4	7.2	3.9	169.0	14.0	29.4	7.2	3.9	169.0	16.0	29.4	7.2	3.9	169.0	
Neely Henry	1	A	5/7/92	0.91	3.6	0.3	19.9	7.3	7.7	141.0	0.3	19.9	7.3	7.7	141.0	1.0	19.9	7.4	7.7	141.0	1.5	19.9	7.5	7.7	141.0	
Neely Henry	1	A	5/7/92	0.91	3.6	0.3	19.9	7.3	7.7	141.0	1.0	19.9	7.4	7.7	141.0	2.0	20.0	7.5	7.7	141.0	5.0	20.0	7.5	7.6	141.0	
Neely Henry	1	A	5/7/92	0.91	3.6	0.3	19.9	7.3	7.7	141.0	10.5	19.9	7.5	7.5	140.0	14.0	19.9	7.5	7.5	140.0	16.0	19.9	7.5	7.5	140.0	

\* estimated  
\*\* barge traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Photic- zone	pH su	Temp C	Diss O2 mg/l	Cond NTU	Turb mg/l	Alk mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N03+ mg/l	P mg/l	Total Ortho P mg/l	Chl A ug/l	TSI per 100ml				
Neely Henry <sup>n</sup> 1	A	5/18/93	1.08	5.8	0.0	23.8	7.9	7.9	130.0	7.2	53.8	53.3	----	6.9	0.087	0.028	0.467	0.050	0.003	2.86	8.8	52	---	
Neely Henry 1	A	8/13/92	0.92	3.7	0.3	29.3	7.6	4.5	147.0	6.2	60.0	---	94.0	7.0	<0.015	0.003	0.299	0.053	<0.004	8.39	19.6	60	1x	
Neely Henry 1	A	8/17/93	1.09	4.0	0.0	29.8	9.0	12.0	190.0	1.0	30.0	9.1	11.9	189.6	2.0	29.4	8.4	6.6	192.0	3.0	29.0	7.8	3.0	192.2
Neely Henry 1	A	8/17/93	1.09	4.0	0.0	29.8	9.0	12.0	190.0	1.5	29.3	7.6	4.3	147.0	2.0	28.8	7.6	2.3	192.4	5.0	28.7	7.5	1.6	192.4
Neely Henry 2	A	5/7/92	0.82	3.3	0.3	20.0	7.2	8.3	141.0	1.0	20.1	7.5	8.2	142.0	1.5	20.1	7.6	8.4	142.0	2.0	20.1	7.6	8.2	142.0
Neely Henry 2	A	8/13/92	0.54	3.3	0.3	20.0	7.2	8.3	141.0	1.0	20.1	7.6	8.2	142.0	2.0	20.1	7.6	8.4	142.0	5.0	20.1	7.7	8.1	142.0
Neely Henry 2	A	8/13/92	0.54	3.3	0.3	29.2	7.7	8.0	151.0	0.3	29.2	7.7	8.4	152.0	1.0	29.2	7.7	5.8	152.0	1.5	29.2	7.7	5.8	152.0
Neely Henry 2	A	8/13/92	0.54	3.3	0.3	29.2	7.7	8.0	151.0	0.3	29.2	7.7	5.7	150.0	7.0	29.2	7.7	5.7	150.0	9.0	29.2	7.7	5.7	151.0
Neely Henry 2	A	8/13/92	0.54	3.3	0.3	29.2	7.7	8.0	151.0	10.9	29.2	7.7	5.6	154.0	10.9	29.2	7.7	5.6	154.0	10.9	29.2	7.7	5.6	154.0

\* estimated  
\*\* barge traffic between replicate water samples  
<sup>n</sup> data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi H	Depth m	Photic- zone H	Temp C	pH su	D0 mg/l	Cond µmhos	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2+ mg/l	total mg/l	ortho mg/l	TOC mg/l	Chl ug/l	TSI	Colif per 100ml			
Point A	1	A	4/29/93	0.76	1.97	---	0.3	20.9	6.8	8.2	57.0	---	20.0	22.0	55.0	58.0	2.0	<0.015	0.260	0.569	0.032	<0.004	5.57	2.8	41	33
Point A	1	A	8/11/93	1.72	3.1	---	0.3	29.9	6.9	7.1	0.075	---	4.6	33.0	54.0	62.0	3.0	<0.015	0.150	0.567	0.018	0.004	5.08	5.5	47	19*
Purdy	1	A	5/11/93	2.83	7.1	---	0.3	29.4	6.9	6.6	0.075	1.5	29.2	6.8	6.2	0.075	2.0	29.1	6.8	5.9	0.075	4.0	26.0	6.6	6.1	0.067
Purdy	1	A	8/24/93	1.60	5.6	---	0.3	24.6	8.2	8.8	230.0	1.0	24.6	8.2	8.8	231.0	1.5	24.5	8.2	8.8	231.0	2.0	24.4	8.2	8.7	231.0
Purdy	1	A	8/24/93	1.34	3.1	---	0.3	30.1	8.2	9.4	108.0	1.0	30.2	8.2	9.4	190.0	1.5	30.0	8.2	9.4	188.0	2.0	29.9	8.2	9.4	189.0
Purdy	2	A	5/11/93	1.34	3.1	---	0.1	24.8	8.3	9.9	231.0	0.1	24.3	8.2	9.4	233.0	1.0	24.3	8.2	9.1	239.0	1.5	24.2	8.1	9.4	239.0
Purdy	2	A	8/24/93	1.34	3.1	---	0.1	23.2	7.7	8.1	270.0	2.0	23.2	7.7	8.1	270.0	3.0	20.9	7.3	5.5	315.0	4.0	19.0	7.1	1.8	283.0

\* estimated

\*\* barge traffic between replicate water samples

○ data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Temp C	pH su	Dissolved Oxygen mg/l	Cond µmhos	Turb NTU	Alk mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	NO3+ mg/l	P mg/l	Chl ug/l	TOC mg/l	TSI	per 100ml				
Purdy	2	A	8/24/93	0.66	2.2	0.1	31.0	8.3	190.0	8.4	191.0	9.5	82.0	110.0	140.0	15.0	<0.015	0.012	0.253	0.015	<0.004	24.10	13.5	56	7*
Smith	1	A	5/12/93	7.52	12.4	0.3	21.4	6.9	8.2	45.0	45.0	1.4	14.0	29.0	54.0	<1.0	<0.015	0.051	<0.150	2.360	<0.004	2.91	1.4	34	<1
Smith	1	B	5/12/93	7.74	12.4	0.3	22.0	6.9	8.1	45.0	45.0	1.3	15.0	30.0	46.0	<1.0	<0.015	0.043	<0.150	0.016	0.004	2.82	1.3	33	<1

\* estimated  
\*\* merge traffic between replicate water samples  
n = data collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

		Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	Temp C	pH su	D0 mg/l	Cond µmho	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2+ mg/l	TKN mg/l	Total orthophosphate mg/l	TOC mg/l	Chl ug/l	A	TSI per 100mL		
		Smith	1	R	8/24/93	4.46	11.3	0.3	31.8	7.0	7.3	45.0	1.5	12.0	38.0	38.0	<1.0	<0.015	0.190	<0.150	<0.004	0.006	2.36	1.7	36	<1	
		Smith	2	R	5/12/93	3.85	6.8	0.3	31.3	7.1	7.4	45.0	1.5	31.1	7.2	7.4	45.0	2.0	31.0	7.2	7.4	45.0	5.0	29.3	7.2	8.0	46.0
									24.9	7.0	8.4	43.0	7.0	19.4	6.7	9.2	44.0	10.0	17.6	6.7	9.2	44.0					
									11.9	6.6	9.8	50.0	15.0	9.5	6.5	5.4	50.0	20.0	9.5	6.5	5.4	50.0					
									30.0	8.7	6.4	49.0	25.0	8.9	6.4	4.0	49.0	30.0	8.7	6.4	4.0	49.0					
									35.0	8.4	6.4	50.0	44.0	8.0	6.6	0.5	29.0	35.0	8.2	6.0	5.4	38.0					
									40.0	8.0	6.6	0.5						5.0	17.1	6.4	7.6	38.0					
									50.0	7.7	6.2	0.1						10.0	14.5	6.1	6.7	36.0					
									60.0	7.7	6.4	0.1						15.0	10.1	6.1	7.6	42.0					
									69.0	7.7	6.4	0.1						20.0	8.9	6.2	7.5	44.0					
																		30.0	8.5	6.1	6.9	41.0					
																		35.0	8.2	6.0	5.4	38.0					
																		40.0	8.0	5.9	2.7	44.0					
																		50.0	7.7	6.2	0.1	82.0					
																		60.0	7.7	6.4	0.1	83.0					
																		69.0	7.7	6.4	0.1	104.0					

\* estimated

\*\* barge traffic between replicate water samples during Phase I Studies.

^ data collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	00078	Photic- zone m	Secchi depth m	Depth m	pH	D0 su	Cond mg/l	Turb NTU	Alk mg/l	Hard mg/l	NH3 mg/l	NO2 mg/l	TKN mg/l	Total Ortho P mg/l	ROC mg/l	Chl ug/l	TSI	Colif per 100ml	31613													
Smith	2	A	8/24/93	4.15	8.7	0.3	7.3	31.0	7.3	----	----	1.2	13.0	35.0	43.0	3.0	<0.015	0.025	0.232	<0.004	0.004	3.10	2.3	39	<1										
						1.0	30.7	7.4	2.6	42.0	1.5	30.5	7.4	7.6	42.0	2.0	30.5	7.4	7.6	42.0															
						3.0	30.4	7.4	7.5	42.0	5.0	28.9	7.4	8.0	43.0	6.0	27.3	6.8	6.3	45.0	7.0	24.1	6.4	1.8	45.0										
						8.0	22.7	6.3	0.7	45.0	10.0	17.9	6.2	0.6	40.0	15.0	11.6	6.4	4.7	39.0	20.0	9.5	6.5	40.0	30.0	8.6	6.5	6.2	40.0						
						40.0	8.2	6.4	3.3	41.0	50.0	7.9	6.7	0.7	50.0	55.0	7.9	6.7	0.5	86.0	35.0	8.4	6.4	3.3	41.0										
						50.0	7.9	6.7	0.5	84.0	55.0	7.9	6.7	0.5	86.0																				
Smith	3	A	5/12/93	3.18	7.1	0.3	23.6	7.7	8.2	36.0	1.0	22.5	7.6	8.1	35.0	1.5	22.1	7.7	8.1	36.0	2.0	22.0	7.7	8.3	35.0	5.0	17.4	6.5	7.2	31.0					
						10.0	15.0	6.4	6.9	48.0	10.0	15.0	6.4	6.9	48.0	20.0	8.9	6.4	8.1	42.0	30.0	8.4	6.3	7.5	42.0	40.0	8.1	6.1	5.4	42.0					
						45.0	8.0	6.0	2.0	48.0	7.0	25.4	6.5	0.9	43.0	8.0	22.4	6.4	1.0	38.0	10.0	18.4	6.3	0.7	36.0	15.0	12.7	6.4	3.1	40.0					
						40.0	8.0	6.0	2.0	48.0	6.0	27.8	6.7	4.0	41.0	25.0	9.1	6.5	6.2	38.0	30.0	8.7	6.5	5.2	40.0	35.0	8.5	6.4	2.6	41.0					
						40.0	8.4	6.4	0.6	47.0	40.0	8.4	6.4	0.6	47.0																				
Smith	3	A	8/24/93	3.52	8.3	0.3	31.2	7.2	7.3	39.0	1.0	30.7	7.3	7.5	39.0	1.5	30.3	7.3	7.6	39.0	2.0	30.2	7.3	7.5	39.0	5.0	29.1	7.1	7.6	39.0	6.0	27.8	6.7	4.0	41.0
						7.0	25.4	6.5	0.9	43.0	7.0	25.4	6.5	0.9	43.0	8.0	22.4	6.4	1.0	38.0	10.0	18.4	6.3	0.7	36.0	15.0	12.7	6.4	3.1	40.0	20.0	9.9	6.5	6.0	41.0
						25.0	9.1	6.5	6.2	38.0	25.0	9.1	6.5	6.2	38.0	30.0	8.7	6.5	5.2	40.0	35.0	8.5	6.4	2.6	41.0	40.0	8.4	6.4	0.6	47.0					

\* estimated

\*\* barge traffic between replicate water samples

^ data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta Rep	Date	Secchi m	Depth m	Temp C	pH su	D0 mg/l urhlos	Cond mg/l	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N03 <sup>a</sup>			N02 <sup>a</sup>			TKN			total ortho mg/l			Chi ug/l			TSI ug/l			Colif per 100ml		
															P mg/l	P mg/l	P mg/l	R mg/l	A mg/l	TOC mg/l	R mg/l	A mg/l	TOC mg/l	R mg/l	A mg/l	TOC mg/l	R mg/l	A mg/l	TOC mg/l	R mg/l	A mg/l				
Tuscaloosa	1	A	5/12/93	4.52	9.3	0.3	21.9	6.3	7.9	67.0	7.8	67.0	19.2	7.9	1.2	12.0	34.0	68.0	<1.0	<0.015	0.007	<0.150	0.023	0.005	2.26	1.3	33	<1	31613						
						1.0	21.9	6.4	7.8	67.0	7.8	67.0	6.0	7.9	1.0	11.0	32.0	66.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						1.5	21.9	6.4	7.8	67.0	7.8	67.0	17.3	7.9	1.0	11.0	32.0	66.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						2.0	21.9	6.4	7.8	67.0	7.8	67.0	15.6	7.8	1.0	11.0	32.0	66.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						4.0	20.8	6.4	7.7	70.0	7.0	70.0	14.3	7.6	0.5	9.0	30.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						5.0	19.2	6.4	7.9	71.0	7.0	71.0	13.3	7.6	0.5	10.0	29.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						6.0	17.3	6.4	7.9	66.0	7.0	66.0	11.3	7.6	0.5	20.0	29.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						7.0	15.6	6.3	7.8	67.0	7.0	67.0	9.0	7.5	0.5	30.0	29.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						8.0	14.3	6.2	7.6	67.0	7.0	67.0	10.0	7.6	0.5	20.0	29.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						9.0	13.3	6.2	7.5	65.0	7.0	65.0	11.3	7.6	0.5	10.0	29.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						10.0	11.3	6.1	7.6	66.0	7.0	66.0	9.0	7.6	0.5	20.0	29.0	65.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						20.0	9.8	6.0	7.4	67.0	7.0	67.0	30.0	9.7	6.0	7.1	61.0	61.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						30.0	31.0	6.4	7.3	64.0	7.0	64.0	31.0	6.9	0.5	31.4	6.9	7.3	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						31.0	31.3	6.9	7.3	64.0	7.0	64.0	31.2	6.9	0.5	31.4	6.9	7.3	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						31.5	31.2	6.9	7.4	63.0	7.0	63.0	31.1	6.9	0.5	31.4	6.9	7.3	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						32.0	31.1	6.9	7.3	63.0	7.0	63.0	29.2	6.8	0.5	29.2	6.8	8.2	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						32.5	30.0	6.8	7.5	62.0	7.0	62.0	26.7	6.7	0.5	26.7	6.7	7.6	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						33.0	29.0	6.5	7.5	63.0	7.0	63.0	22.9	6.5	0.5	22.9	6.5	5.3	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						34.0	19.6	6.3	4.6	64.0	7.0	64.0	19.6	6.3	0.5	19.6	6.3	4.6	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						35.0	17.9	6.3	4.6	63.0	7.0	63.0	17.9	6.3	0.5	17.9	6.3	4.6	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						36.0	16.4	6.3	4.6	64.0	7.0	64.0	16.4	6.3	0.5	16.4	6.3	4.6	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						37.0	15.1	6.3	4.9	65.0	7.0	65.0	15.1	6.3	0.5	15.1	6.3	4.9	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						38.0	12.0	6.3	5.3	67.0	7.0	67.0	12.0	6.3	0.5	12.0	6.3	5.4	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						39.0	12.1	6.3	5.6	69.0	7.0	69.0	12.1	6.3	0.5	12.1	6.3	5.6	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						40.0	11.7	6.3	5.8	68.0	7.0	68.0	11.7	6.3	0.5	11.7	6.3	5.8	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						41.0	10.6	6.3	5.8	65.0	7.0	65.0	10.6	6.3	0.5	10.6	6.3	5.8	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						42.0	10.3	6.3	5.2	65.0	7.0	65.0	10.3	6.3	0.5	10.3	6.3	5.2	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						43.0	10.2	6.3	3.3	69.0	7.0	69.0	10.2	6.3	0.5	10.2	6.3	3.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						44.0	16.6	5.8	3.8	67.0	7.0	67.0	16.6	5.8	0.5	16.6	5.8	3.8	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						45.0	14.6	5.9	4.2	74.0	7.0	74.0	14.6	5.9	0.5	14.6	5.9	4.2	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						46.0	9.0	11.6	5.9	5.1	83.0	83.0	9.0	11.6	5.9	5.1	83.0	5.3	83.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x						
						47.0	10.0	11.0	6.0	5.3	83.0	83.0	10.0	11.0	6.0	5.3	83.0	5.4	83.0	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x						
						48.0	10.8	6.0	5.4	84.0	7.0	84.0	10.8	6.0	0.5	10.8	6.0	5.4	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							
						49.0	12.0	6.0	5.4	84.0	7.0	84.0	12.0	6.0	0.5	12.0	6.0	5.4	<0.001	<0.002	0.006	<0.150	0.026	0.004	2.75	3.4	43	3x							

\* estimated

\*\* barge traffic between replicate water samples

n data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Photic-			DO mg/l	Cond µeq/l	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	TKN mg/l	P mg/l	total ortho P mg/l	Chl ug/l	Colif 100ml	TSI Per	
				n	H	Depth m																
Tuscaloosa	2	A	8/25/93	2.89	5.4	0.3	30.9	6.9	7.5	100.0	1.0	30.9	6.9	7.5	100.0	1.0	2.0	22.0	45.0	81.0	1.0 <0.015 0.008 <0.150 0.008 0.007 2.39 1.5 35 IX	
							1.0	30.9	6.9	7.5	100.0	1.5	30.9	7.0	7.5	100.0	2.0	30.9	7.0	7.4	100.0	
							3.0	30.9	7.0	7.4	100.0	4.0	29.5	6.5	3.9	105.0	5.0	28.2	6.3	1.1	105.0	
							6.0	26.5	6.2	0.7	72.0	10.0	16.2	6.9	0.4	124.0	12.5	13.5	6.9	0.4	112.0	
Tuscaloosa	2	B	8/25/93	2.89	5.2	0.3	31.1	7.3	7.5	100.0	1.0	31.0	7.3	7.5	100.0	1.5	30.9	7.2	7.5	100.0	2.4 19.0 45.0 86.0 1.0 <0.015 0.019 <0.150 0.009 0.009 2.10 3.9 44 <1	
							2.0	30.8	7.1	7.5	100.0	3.0	30.6	7.0	7.4	100.0	4.0	30.5	6.8	7.3	100.0	
							5.0	28.7	6.3	2.5	107.0	6.0	27.3	6.3	0.4	106.0	10.0	16.0	6.9	0.4	126.0	
							12.5	13.5	6.9	0.4	112.0											
H.F. George <sup>a</sup> 1	A	5/26/92	2.38	9.5	0.3	25.3	9.1	9.5	79.8	1.0	25.3	9.1	9.7	79.8	2.0	25.3	9.1	9.7	79.8	2.5 18.3 20.5 --- 2.0 0.014 0.024 0.442 0.016 0.000 4.28 9.3 52 ---		
							4.0	25.3	9.1	9.7	79.8	6.0	25.3	9.0	9.6	79.6	8.0	24.8	8.7	9.1	78.6	
							9.0	21.7	7.2	5.0	78.0	10.0	21.0	6.9	4.1	78.0	11.0	20.7	6.7	3.2	78.2	
							12.0	20.5	6.6	2.8	78.2	13.0	20.2	6.5	3.2	78.6	14.0	20.1	6.5	3.2	78.6	
							16.0	19.8	6.5	3.0	79.4	19.0	19.6	6.4	3.0	79.2	20.0	19.1	6.4	2.7	80.4	

\* estimated

\*\* barge traffic between replicate water samples

<sup>a</sup> data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Photic- zone	Temp C	PH su	DO mg/l	Cond umhos	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	TOC mg/l	Colif per 100ml							
W.F. George <sup>n</sup> 1	A	5/4/93	0.96	3.8	---	0.0	21.0	7.3	8.2	62.4	---	10.8	19.0	16.6	---	5.0	0.117	0.223	0.434	0.033	0.002				
				1.0	19.9	7.2	8.3	62.5	---	2.0	19.7	7.2	8.1	62.6	3.0	19.7	7.1	8.0	62.6	5.0	19.4	7.1	8.0	61.2	
				2.0	19.7	7.2	8.1	62.6	5.0	19.4	7.1	7.9	60.6	7.0	19.3	7.1	7.9	63.4	9.0	18.7	7.0	6.8	63.4		
				3.0	19.7	7.2	8.1	62.6	10.0	18.6	6.9	6.5	63.4	14.0	18.4	6.8	6.3	62.8	20.0	18.2	6.7	6.0	63.6		
				5.0	19.4	7.1	8.0	61.2	22.0	18.2	6.7	5.9	63.8	22.0	18.2	6.7	6.0	63.6	22.0	18.2	6.7	5.9	63.8		
W.F. George <sup>n</sup> 1	A	8/4/92	1.76	6.9	---	0.0	30.5	9.0	8.9	99.0	---	2.8	22.0	21.0	---	3.2	0.013	0.002	0.439	0.026	0.000	4.06	10.7	54	---
				1.0	30.5	9.1	8.8	89.2	2.0	30.4	9.0	8.7	89.0	3.0	30.4	9.0	8.6	89.0	4.0	30.0	8.5	7.5	87.2		
				2.0	30.4	9.0	8.7	89.0	5.0	29.8	7.9	6.1	87.4	6.0	29.5	7.5	5.1	87.4	7.0	29.2	7.1	3.4	87.8		
				3.0	30.4	9.0	8.6	89.0	8.0	29.1	7.0	2.9	87.6	9.0	28.9	6.9	1.8	87.8	10.0	28.8	6.8	1.3	89.0		
				4.0	30.0	8.5	7.5	87.2	10.0	28.5	6.7	0.3	89.0	12.0	28.3	6.7	0.2	91.0	14.0	28.3	6.7	0.2	91.0		
				5.0	29.8	7.9	6.1	87.4	20.0	28.0	6.7	0.2	93.8	27.0	26.4	6.8	0.2	109.4	27.0	26.4	6.8	0.2	109.4		
W.F. George <sup>n</sup> 1	A	8/3/93	1.85	7.4	---	0.0	30.5	8.2	7.0	83.6	---	2.6	22.3	20.2	---	3.7	0.055	0.016	0.454	0.018	0.000	4.15	6.3	49	---
				1.0	30.6	8.2	7.0	83.8	2.0	30.6	8.2	7.0	83.6	3.0	30.5	8.2	6.9	83.6	5.0	30.4	8.0	6.5	83.2		
				3.0	30.5	8.2	6.9	83.6	7.0	30.4	7.8	6.5	83.4	9.0	30.1	7.3	3.1	84.0	10.0	29.8	7.0	1.6	84.2		
				5.0	30.4	8.0	6.5	83.2	11.0	29.4	6.7	0.1	86.8	12.0	29.1	6.6	0.1	89.0	14.0	28.7	6.5	0.0	90.6		
				7.0	30.4	7.8	6.5	83.4	22.0	27.4	6.6	0.0	98.2	27.0	26.7	6.6	0.0	100.6	27.0	26.7	6.6	0.0	100.6		

\* estimated  
\*\* large traffic between replicate water samples  
\*\* date collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	pH su	D0 mg/l	Cond umhos	Turb NTU	Alk mg/l	Hard mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	TKN mg/l	P mg/l	total ortho P mg/l	Chl ug/l	TSI per 100ml	Colif ---						
H.F. George's 4	R	5/26/92	1.28	5.1	0.0	25.7	9.0	9.8	84.2	25.7	9.1	83.0	5.2	18.5	19.4	---	4.6	0.086	0.135	0.549	0.032	0.002	3.93	8.2	51	---	
H.F. George's 4	A	5/4/93	1.22	4.9	0.0	22.0	7.0	8.9	72.2	21.6	7.3	8.6	72.2	9.1	16.3	18.7	---	7.8	0.081	0.337	0.467	0.038	0.002	3.022	6.3	49	---
H.F. George's 4	A	8/4/92	1.21	4.8	0.0	31.2	8.6	8.4	93.0	20.6	7.3	8.2	73.0	1.0	30.9	8.7	8.7	93.0	30.2	8.3	7.9	91.2	4.0	30.0	7.2	5.9	91.2
H.F. George's 4	A	8/4/92	1.21	4.8	0.0	27.6	6.5	6.5	92.6	29.2	6.5	6.6	92.6	5.0	29.7	6.8	4.7	91.8	29.1	6.4	1.7	94.0	12.0	28.8	6.4	0.8	94.6
H.F. George's 4	A	8/4/92	1.21	4.8	0.0	29.4	6.6	3.4	92.6	29.5	6.7	4.0	92.2	14.0	28.5	6.4	0.3	96.2	28.8	6.4	0.2	95.8	16.0	28.8	6.4	0.2	102.4

\* estimated  
\*\* barge traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Site	Rep	Date	Secchi H	Photic zone H	Depth m	Temp C	pH su	D0 mg/l	Cond umhos	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N02+ mg/l	N02+ mg/l	TKN mg/l	Total ortho mg/l	P mg/l	Chl ug/l	TSI per 100ml	Colif							
H.F. George <sup>n</sup> 4	A	8/3/93	1.50	6.0	---	---	0.0	30.8	7.4	6.2	92.0	5.6	22.3	21.0	---	6.6	0.134	0.177	0.691	0.035	0.000	3.80	7.9	51	---						
				1.0	30.7	7.4	5.9	92.0	5.5	92.0	5.1	92.0	5.0	30.2	7.1	4.6	92.0	7.0	28.6	7.0	3.8	91.4	9.0	29.4	7.0	4.2	91.0				
				2.0	30.6	7.3	5.9	92.0	5.5	92.0	5.1	92.0	5.0	30.4	7.2	4.6	92.0	7.0	29.3	6.9	2.8	91.4	11.0	29.0	6.9	2.8	91.4				
				3.0	30.4	7.2	5.1	92.0	5.1	92.0	5.0	30.2	7.1	4.6	92.0	7.0	28.7	6.8	0.3	95.6	13.0	28.7	6.8	0.3	95.6						
				4.0	28.7	6.8	0.3	95.6	5.0	92.0	5.1	92.0	5.0	28.7	6.8	0.2	96.6	15.0	28.4	6.8	0.2	96.6	17.0	27.9	6.8	0.1	97.6				
				5.0	27.8	6.8	0.1	98.2	5.0	92.0	5.1	92.0	5.0	27.8	6.8	0.1	98.2	19.0	27.6	6.8	0.1	99.6	20.0	27.6	6.8	0.1	99.6				
				6.0	27.6	6.8	0.1	99.6	5.0	92.0	5.1	92.0	5.0	27.6	6.8	0.1	99.6	20.0	27.6	6.8	0.1	99.6	20.0	27.6	6.8	0.1	99.6				
				4.5	---	---	---	---	---	---	8.8	20.0	20.5	---	7.3	0.212	0.376	0.64	0.056	0.007	3.26	9.6	53	---							
H.F. George <sup>n</sup> 6	A	5/26/92	1.12	4.5	---	---	0.0	24.2	7.3	6.4	92.8	1.0	24.2	7.3	6.3	92.8	2.0	24.1	7.2	6.1	93.0	3.0	23.9	7.0	6.9	93.2					
				5.0	22.7	6.9	3.9	153.0	4.0	23.8	7.1	6.6	101.4	6.0	23.5	6.9	5.8	112.6	8.0	23.2	6.9	5.4	121.2	10.0	22.7	6.9	3.9	153.0			
				6.0	21.7	6.8	3.2	173.2	7.0	20.8	6.8	3.2	146.6	13.0	20.1	6.8	3.1	126.4	11.0	21.7	6.8	3.2	173.2	12.0	20.8	6.8	3.2	146.6			
				7.0	19.7	6.9	6.9	8.1	19.7	19.7	6.9	8.1	5.0	19.7	6.9	6.9	8.1	7.0	19.7	6.9	8.1	25.2	9.0	19.7	6.9	8.2	25.2				
				8.0	19.7	6.9	6.9	8.1	19.7	19.7	6.9	8.1	5.0	19.7	6.9	6.9	8.1	11.0	19.7	6.9	8.2	25.2	13.0	19.7	6.9	8.2	25.2				
				9.0	19.7	6.9	6.9	8.1	19.7	19.7	6.9	8.1	5.0	19.7	6.9	6.9	8.1	15.0	19.6	6.9	8.1	25.2	13.0	19.7	6.9	8.2	25.2				
				10.0	19.7	6.9	6.9	8.1	19.7	19.7	6.9	8.1	5.0	19.7	6.9	6.9	8.1	15.2	16.3	16.1	---	8.7	0.173	0.334	0.559	0.052	0.010	2.83	3.1	42	---
H.F. George <sup>n</sup> 6	A	5/4/93	0.96	3.84	---	---	0.0	20.2	7.1	8.3	75.4	1.0	19.8	7.0	8.2	75.0	2.0	19.7	6.9	8.1	75.2	3.0	19.7	6.9	8.1	75.0	5.0	19.7	6.9	8.1	75.2
				1.0	19.8	7.0	8.2	75.0	2.0	19.7	6.9	8.1	5.0	19.7	6.9	8.1	75.2	7.0	19.7	6.9	8.1	75.2	9.0	19.7	6.9	8.2	75.2				
				2.0	19.7	6.9	8.2	75.0	3.0	19.7	6.9	8.1	5.0	19.7	6.9	8.1	75.2	11.0	19.7	6.8	8.2	75.2	13.0	19.7	6.9	8.2	75.2				
				4.0	19.7	6.9	8.2	75.0	5.0	19.7	6.9	8.1	5.0	19.7	6.9	8.1	75.2	15.0	19.6	6.9	8.1	75.2	15.0	19.6	6.9	8.1	75.2				

\* estimated

\*\* barge traffic between replicate water samples

<sup>n</sup> data collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992-1993

Reservoir	Sta	Rep	Date	Photic-				DO	Cond	Turb	Alk	Hard	TDS	TSS	NH3	TKN	total	ortho	TOC	P	P	Chi	Colif							
				Secchi	zone	Depth	n																							
H.F. George <sup>a</sup>	6	A	8/4/92	1.16	4.6	0.0	30.0	7.3	7.9	94.4	---	---	---	---	---	---	---	---	0.15	0.279	0.532	0.050	0.001	3.523	10.0	53				
H.F. George <sup>a</sup>	6	A	8/3/93	1.28	5.1	0.0	29.9	7.3	7.9	94.0	1.0	29.9	7.1	7.5	94.8	2.0	29.7	7.1	7.9	95.2	4.0	29.7	7.1	7.3	95.2	5.0	29.7	7.0	7.3	95.2
H.F. George <sup>a</sup>	6	A	8/20/92	1.03	4.1	0.3	25.5	6.8	8.2	256.0	1.0	24.8	6.3	8.1	256.0	1.0	30.4	7.0	5.9	101.0	2.0	30.3	7.0	5.6	101.4	3.0	30.3	7.0	5.6	101.2
H.F. George <sup>a</sup>	6	A	8/17/92	1.22	4.9	0.3	30.0	7.7	8.2	312.0	1.0	24.7	7.0	8.1	255.0	1.5	24.7	7.0	8.1	255.0	2.0	24.6	7.0	8.0	255.0	2.5	24.6	7.0	7.9	255.0
Harrisor	1	A	5/20/92	1.03	4.1	0.3	30.0	7.7	8.2	312.0	1.0	29.4	7.7	8.2	313.0	1.0	29.1	7.5	7.7	313.0	1.5	29.0	7.4	7.3	315.0	2.0	28.9	7.4	7.0	314.0
Harrisor	1	A	8/17/92	1.22	4.9	0.3	30.0	7.7	8.2	312.0	1.0	28.9	7.3	7.9	313.0	1.0	28.9	7.3	6.7	310.0	1.5	28.9	7.3	6.7	310.0	2.0	28.9	7.2	6.4	313.0

<sup>a</sup> estimated  
<sup>\*\*</sup> barge traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi H	Depth m	Photic- zone H	Temp C	pH su	DO mg/l	Cond µmho/l	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	TKN mg/l	P mg/l	Total ortho P mg/l	TOC mg/l	Chi ug/l	A ug/l	TSI per 100ml	Colif ----	00010	00040	000300	00095	02028	00410	000900	00515	00530	00610	00620	00625	00650	00660	32211	05329	31613																																					
Warrior	2	A	5/20/92	0.81	3.2	---	0.3	22.8	7.4	9.4	329.0	1.0	25.9	7.3	9.1	322.0	1.5	25.7	7.3	9.1	328.0	2.0	25.7	7.3	9.1	328.0	5.0	25.6	7.3	9.0	330.0	10.0	25.6	7.2	8.8	332.0	13.0	36.0	---	199.0	11.0	0.110	0.490	0.458	0.027	<0.004	4.20	8.8	52	10*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---													
Warrior	2	A	8/17/92	0.74	3.0	---	0.3	30.8	7.8	8.6	296.0	1.0	28.9	7.6	8.0	295.0	1.5	28.8	7.5	7.8	296.0	2.0	28.7	7.5	7.6	297.0	5.0	28.5	7.3	7.1	296.0	10.0	28.4	7.3	6.8	300.0	14.0	28.2	7.2	6.3	305.0	7.9	48.0	---	215.0	9.0	<0.015	0.300	0.618	0.027	<0.004	2.68	10.4	54	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---								
Heiss n	1	A	5/5/92	0.74	3.0	---	0.0	19.5	8.4	9.0	144.2	1.0	19.4	8.3	8.9	144.4	2.0	19.4	8.3	8.8	145.2	4.0	19.3	8.2	8.7	144.6	6.0	19.2	8.1	8.7	143.8	8.0	18.9	8.1	8.5	144.2	9.0	18.6	7.6	6.4	145.6	14.0	54.0	---	16.0	0.046	0.002	0.475	0.070	0.002	3.26	15.8	58	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---										
Heiss n	1	A	5/05/93	0.70	2.2	---	0.3	20.7	8.0	9.2	124.0	1.0	20.9	8.0	9.1	123.0	1.5	20.1	7.7	8.5	123.0	2.0	20.3	7.8	8.6	123.0	5.0	19.6	7.5	8.1	124.0	10.0	19.4	7.5	7.9	122.0	15.0	19.4	7.4	7.8	123.0	16.0	19.3	7.4	7.8	130.0	7.7	50.0	69.0	105.0	11.0	<0.015	0.120	0.553	0.060	0.009	3.22	14.7	57	30*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
Heiss n	1	A	8/18/92	0.93	3.7	---	0.0	27.4	8.3	7.6	142.6	1.0	27.1	8.3	7.0	142.4	2.0	27.1	8.0	6.4	142.6	3.0	27.1	8.0	6.3	142.8	4.0	27.1	8.0	6.4	142.6	5.0	27.1	8.0	6.3	142.6	6.0	27.0	7.7	4.8	143.2	7.0	26.9	7.6	4.6	132.5	8.0	26.8	7.5	3.8	144.0	9.4	59.8	---	11.0	0.032	0.005	0.446	0.082	0.010	6.41	32.9	65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

\* estimated  
\*\* barge traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi H	Depth m	Photic- zone H	Temp C	pH su	D0 mg/l	Cond uhos	Turb NTU	Flk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2+ mg/l	P mg/l	TKN mg/l	Total ortho P mg/l	A ug/l	TSI	Colif 100ml																																																					
Heiss	1	A	8/18/93	0.97	2.4	---	29.0	8.4	7.8	162.0	5.5	65.0	77.0	102.0	8.0	<0.015	0.018	0.720	0.054	0.004	4.12	15.6	<1																																																					
					1.0	28.8	7.7	5.9	163.0	1.5	28.7	7.8	5.8	162.0	2.0	28.7	7.6	4.8	162.0	3.0	28.7	7.5	4.5	162.0																																																				
					4.0	28.6	7.9	3.9	163.0	5.0	28.5	7.3	3.6	163.0	6.0	27.8	7.1	2.7	164.0	7.0	27.5	7.1	1.7	170.0																																																				
					8.0	27.4	7.0	1.0	171.0	9.0	27.3	7.0	0.6	171.0	10.0	27.3	7.0	0.6	170.0	15.0	27.0	7.0	0.4	172.0																																																				
Heiss	2	A	5/5/92	0.50	2.0	---	0.0	19.9	8.8	10.8	130.2	---	---	---	---	17.7	47.5	---	---	18.0	0.128	0.006	0.643	0.088	0.003	5.97	26.5	63	---																																															
					1.0	19.7	8.7	10.5	130.4	2.0	19.5	8.7	10.1	131.0	4.0	18.8	8.1	8.9	130.8	6.0	18.6	7.9	8.5	131.0	8.0	17.7	7.6	7.5	131.0	10.0	17.7	7.5	7.4	131.0																																										
					12.0	17.6	7.5	7.2	132.0	13.0	17.6	7.4	7.1	132.4	12.0	17.6	7.5	7.2	132.0	13.0	17.6	7.5	7.2	132.0	10.0	17.7	7.5	7.4	131.0																																															
Heiss	2	A	5/06/93	0.72	2.3	---	0.3	20.4	7.4	9.1	127.0	1.0	20.0	7.2	8.4	130.0	1.5	19.9	7.2	8.3	128.0	2.0	19.8	7.3	8.4	127.0	5.0	18.9	7.0	7.4	128.0	10.0	18.2	6.9	6.7	125.0																																								
					8.0	18.2	6.9	6.7	125.0	12.0	18.0	6.9	6.6	120.0	18.0	6.9	6.6	120.0	18.0	6.9	6.6	120.0	18.0	6.9	6.6	120.0	18.0	6.9	6.6	120.0	18.0	6.9	6.6	120.0																																										
Heiss	2	A	8/18/92	0.51	2.0	---	0.0	25.1	7.5	6.8	127.6	1.0	25.1	7.4	6.5	127.4	2.0	25.1	7.3	6.4	127.0	3.0	25.1	7.3	6.2	125.6	4.0	25.1	7.2	6.0	125.6	5.0	25.1	7.2	5.8	125.4	6.0	25.0	7.2	5.8	123.8	7.0	24.9	7.1	5.4	116.2	8.0	24.8	7.0	5.2	118.2	9.0	24.6	7.0	4.7	113.6	10.0	24.2	6.9	4.0	108.8	11.0	24.1	6.8	3.8	108.0	12.0	24.1	6.8	3.6	108.4	13.0	24.1	6.8	3.4	108.4

\* estimated

\*\* barge traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Photic- zone m	Depth m	pH su	D0 mg/l	Cond umhos	Turb NTU	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	Total mg/l	ortho mg/l	TOC mg/l	P ug/l	P ug/l	Chl ug/l	TSI per 100ml	Colif -----	
Heiss	2	A	8/19/93	0.73	1.9	0.3	23.4	8.0	7.2	168.0	8.0	64.0	79.0	105.0	13.0	<0.015	0.017	0.772	0.078	0.016	4.60	15.2	57	3x
						1.0	29.4	8.1	7.1	168.0														
						1.5	29.5	8.1	7.0	168.0														
						2.0	29.5	8.1	6.8	167.0														
						3.0	29.2	7.8	5.9	169.0														
						4.0	28.9	7.9	4.9	172.0														
						5.0	28.6	7.1	3.4	176.0														
						6.0	28.3	7.0	2.3	176.0														
						7.0	27.7	6.9	1.3	175.0														
						8.0	27.3	6.8	0.4	176.0														
						9.0	27.2	6.8	0.4	176.0														
						10.0	27.2	6.8	0.4	177.0														
Heiss	3	A	5/06/93	0.61	1.8	0.3	19.3	6.8	7.5	109.0								18.5	44.0	64.0	116.0	15.0	<0.015	
						1.0	19.1	6.8	7.5	109.0														
						1.5	19.1	6.8	7.4	110.0														
						2.0	19.1	6.8	7.4	110.0														
						5.0	18.9	6.8	7.1	106.0														
						7.0	18.7	6.8	7.0	108.0														
						10.0	18.6	6.8	7.0	108.0														
Heiss	3	A	8/19/93	0.72	1.7	0.3	29.7	8.0	8.3	192.0								8.1	64.0	82.0	121.0	12.0	<0.015	
						1.0	29.7	8.0	8.0	192.0														
						1.5	29.6	7.9	7.8	192.0														
						2.0	29.5	7.8	7.3	192.0														
						3.0	29.1	7.5	6.2	195.0														
						4.0	28.7	7.3	5.6	195.0														
						5.0	28.2	7.2	4.6	197.0														
						6.0	28.1	7.1	4.9	197.0														
						7.0	28.0	7.1	4.4	197.0														

\* estimated

\*\* barge traffic between replicate water samples  
^ data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Site	Rep	Date	Secchi m	Depth m	Temp C	pH su	Dissolved Oxygen mg/l	Cond. µTU	Turb mg/l	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	N03+ mg/l	TKN mg/l	P ug/l	total ortho P ug/l	TOC mg/l	R ug/l	TSI	Chl per 100ml	Colif	316.25				
Heiss	4	R	5/06/93	0.51	1.8	0.3	19.1	6.7	7.0	107.0	23.0	39.0	64.0	100.0	17.0	<0.015	0.360	0.367	0.093	0.031	3.98	3.5	43	193						
Heiss	4	R	8/19/93	0.74	1.7	0.3	18.9	6.7	6.6	107.0	5.0	18.9	6.7	6.6	107.0	7.0	18.9	6.7	6.6	106.0	10.0	<0.015	0.290	<0.150	0.170	0.076	4.36	23.4		
Heiss	Point n 1	A	5/19/92	2.80	11.2	0.0	30.7	8.0	9.0	194.0	1.0	30.2	7.6	7.6	194.0	1.5	30.0	7.4	6.9	194.0	2.0	30.0	7.4	6.8	195.0	3.0	29.9	7.9	6.7	194.0
Heiss	Point n 1	A	5/19/92	2.80	11.2	0.0	25.3	8.9	9.6	73.0	2.0	25.2	8.9	9.2	73.0	2.0	24.8	8.9	9.9	72.6	3.0	23.1	9.0	10.4	72.4	4.0	21.7	8.7	9.7	72.0
Heiss	Point n 1	A	5/19/92	2.80	11.2	0.0	21.7	8.7	9.7	72.0	5.0	20.6	7.6	8.1	71.2	6.0	19.6	7.1	6.3	70.8	7.0	19.0	6.9	5.6	70.6	9.0	18.5	6.8	5.5	71.4
Heiss	Point n 1	A	5/19/92	2.80	11.2	0.0	17.8	6.7	5.1	72.6	11.0	17.8	6.7	5.1	72.6	12.0	17.0	6.6	3.8	70.8	13.0	16.4	6.6	3.3	73.8	14.0	15.7	6.5	2.4	66.6
Heiss	Point n 1	A	5/19/92	2.80	11.2	0.0	14.7	6.4	1.5	67.2	20.0	14.7	6.4	1.5	67.0	22.0	14.6	6.4	1.5	68.2	23.0	14.5	6.4	1.2	72.4					

x estimated

xx barge traffic between replicate water samples

n data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi	Depth	Temp	pH	D0	Cond	Turb	Alk	Hard	TDS	TSS	NH3	N03 <sup>a</sup>	P	Chl	total ortho	TOC	A	TSI	Colif	per	100ml
West Point n 1	A	8/25/92	2.01	8.0	---	0.0	27.3	7.7	7.2	82.4	7.1	82.6	82.6	82.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	32211	85329	31613
						1.0	27.4	7.7	7.0	82.4	7.0	82.4	82.4	82.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						2.0	27.4	7.7	7.0	82.4	7.0	82.4	82.4	82.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	00625	00620	00610
						3.0	27.4	7.7	7.0	82.4	7.0	82.4	82.4	82.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	32211	85329	31613
						5.0	27.4	7.7	6.9	82.4	7.0	82.4	82.4	82.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						7.0	27.4	7.6	6.8	82.2	7.0	82.2	82.2	82.2	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						9.0	27.4	7.6	6.8	82.4	7.0	82.4	82.4	82.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						10.0	27.4	7.5	6.7	82.4	7.0	82.4	82.4	82.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						11.0	26.6	6.7	6.3	86.0	7.0	86.0	86.0	86.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						13.0	25.7	6.6	0.2	89.2	7.0	89.2	89.2	89.2	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						15.0	25.2	6.6	0.2	88.4	7.0	88.4	88.4	88.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						20.0	24.5	6.5	0.2	83.4	7.0	83.4	83.4	83.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						23.0	23.0	6.8	0.1	118.0	7.0	118.0	118.0	118.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						8.9	---	---	---	---	2.8	20.0	18.6	---	---	2.7	0.082	0.449	0.376	0.023	0.000	3.46	5.1	47	---
						0.0	25.8	9.0	10.3	74.8	7.0	74.8	74.8	74.8	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						1.0	25.3	9.0	10.6	73.6	7.0	73.6	73.6	73.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						2.0	24.6	9.2	11.7	77.6	7.0	77.6	77.6	77.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						3.0	23.2	9.0	10.8	74.4	7.0	74.4	74.4	74.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						4.0	21.7	7.9	8.7	71.0	7.0	71.0	71.0	71.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						5.0	20.4	7.2	6.6	73.6	7.0	73.6	73.6	73.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						6.0	18.9	6.7	5.9	73.4	7.0	73.4	73.4	73.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						7.0	17.9	6.7	5.5	72.4	7.0	72.4	72.4	72.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						8.0	17.9	6.7	5.3	61.6	7.0	61.6	61.6	61.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						10.0	17.5	6.5	4.5	58.4	7.0	58.4	58.4	58.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						12.0	16.6	6.4	2.1	55.2	7.0	55.2	55.2	55.2	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						13.0	15.7	6.4	0.6	58.0	7.0	58.0	58.0	58.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						14.0	15.2	6.3	0.4	65.6	7.0	65.6	65.6	65.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						15.0	15.0	6.5	0.3	68.0	7.0	68.0	68.0	68.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						7.2	---	---	---	---	3.3	21.3	21.0	---	---	3.4	0.027	0.205	0.330	0.022	0.001	4.09	14.2	57	---
						0.0	27.7	8.1	7.7	83.4	7.0	83.4	83.4	83.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						1.0	27.7	8.2	7.6	83.2	7.0	83.2	83.2	83.2	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						2.0	27.6	8.1	7.4	82.6	7.0	82.6	82.6	82.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						3.0	27.4	7.9	7.3	82.0	7.0	82.0	82.0	82.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						4.0	27.3	7.7	7.0	81.0	7.0	81.0	81.0	81.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						5.0	27.3	7.5	6.6	80.0	7.0	80.0	80.0	80.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						7.0	27.3	7.4	6.5	80.0	7.0	80.0	80.0	80.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						8.0	27.3	7.4	6.5	80.0	7.0	80.0	80.0	80.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						9.0	27.3	7.2	5.4	80.0	7.0	80.0	80.0	80.0	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						10.0	26.4	6.7	0.2	75.8	7.0	75.8	75.8	75.8	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						11.0	26.0	6.6	0.1	61.4	7.0	61.4	61.4	61.4	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						12.0	25.5	6.4	0.2	44.8	7.0	44.8	44.8	44.8	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						13.0	25.0	6.3	0.1	42.6	7.0	42.6	42.6	42.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						15.0	24.4	6.4	0.1	55.6	7.0	55.6	55.6	55.6	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680
						17.0	23.9	6.6	0.1	71.2	7.0	71.2	71.2	71.2	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	ug/l	30650	00660	00680

\* estimated  
\*\* barge traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Photic zone m	Secchi m	Depth m	pH su	D0 mg/l	Cord urhns	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	total ortho mg/l	TOC mg/l	P ug/l	Chi ug/l	Colif per 100ml	TSI per 100ml	31613					
Hoodruff	1	A	4/29/92	0.89	3.6	0.3	19.2	6.3	8.4	90.0	8.4	89.0	89.0	35.0	---	84.0	16.0	<0.030	0.210	0.295	1.690	0.005	4.46	7.2	50	8*		
Hoodruff	1	A	5/5/93	0.91	3.2	0.3	21.3	7.1	8.5	99.0	8.3	98.0	98.0	7.1	0.3	20.0	7.1	8.3	98.0	0.015	0.260	0.358	0.054	0.009	3.61	5.7	48.0	3*
Hoodruff	1	A	8/11/92	1.12	4.5	0.3	30.0	7.1	7.2	130.0	6.5	131.0	131.0	7.1	0.3	29.7	7.1	6.4	131.0	0.027	<0.150	0.033	<0.004	3.54	12.0	55	3*	
Hoodruff	1	A	8/18/93	1.02	4.1	0.1	32.5	8.4	9.8	117.0	7.0	48.0	48.0	7.1	0.1	30.9	8.5	10.3	118.0	0.027	<0.150	0.033	<0.004	4.42	20.0	60	1*	
Hoodruff	2	A	4/29/92	0.99	4.0	0.3	18.7	6.8	8.9	89.0	8.0	89.0	89.0	7.1	0.3	18.5	7.1	8.8	89.0	0.030	0.210	0.521	0.038	<0.004	5.21	9.7	53	7*

\* estimated  
\*\* large traffic between replicate water samples  
n data collected by Auburn University during Phase I Studies.

## Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi m	Depth m	Photic- zone m	pH su	D0 mg/l	Cond µhos	Turb NTU	Alk mg/l	Hard mg/l	TSS mg/l	NH3 mg/l	N02 mg/l	TKN mg/l	P mg/l	Total ortho mg/l	TOC mg/l	Chi ug/l	TSI per 100ml			
Hoodruff	2	H	5/5/93	---	3.1	---	---	0.3	20.0	7.2	8.7	93.0	6.8	36.0	57.0	86.0	10.0	<0.015	0.142	0.434	0.038 <0.004 4.27	3.9	44 33*	
Hoodruff	2	A	8/11/92	0.85	3.4	---	---	0.3	31.9	7.7	9.1	49.0	8.5	51.0	---	80.0	15.0	<0.015	0.044	0.386	0.049 <0.004 8.57	15.9	58 4*	
Hoodruff	2	A	8/19/93	1.10	2.7	---	0.1	30.1	7.8	8.7	140.0	7.3	48.0	65.0	90.0	7.0	<0.015	0.028	0.544	0.045 0.023	3.84	8.1	51 8*	
Hoodruff	3	A	4/29/92	1.16	4.6	---	0.1	30.1	7.2	6.9	128.0	7.3	128.0	128.0	128.0	6.9	127.0	6.9	127.0	127.0	127.0	127.0	127.0	127.0
Hoodruff	3	A	5/6/93	0.93	3.5	---	0.3	18.6	6.9	9.5	29.0	7.1	34.0	---	76.0	3.0	<0.030	0.200	0.560	0.029	0.006	4.43	9.0	52 5*
Hoodruff	3	A	8/11/92	1.54	6.2	---	0.3	19.4	7.3	8.8	88.0	7.1	34.0	52.0	86.0	10.0	<0.015	0.190	0.504	0.037	0.005	4.03 4.0	44 103	
Hoodruff	3	A	8/11/92	1.54	6.2	---	0.3	32.4	7.8	8.4	152.0	7.8	31.9	7.8	8.3	152.0	7.6	8.0	152.0	7.6	8.0	152.0	7.9	152.0
							1.0	19.3	7.2	8.8	88.0	7.1	30.5	7.6	7.9	152.0	7.4	7.0	152.0	7.4	6.8	152.0		

\* estimated

 \*\* barge traffic between replicate water samples  
 ^ data collected by Auburn University during Phase I Studies.

Reservoir Water Quality Monitoring Program 1992--1993

Reservoir	Sta	Rep	Date	Secchi H	Depth m	Photic- zone H	pH su	D0 mg/l	Cond umhos mg/l	Turb NTU	Alk mg/l	Hard mg/l	TDS mg/l	TSS mg/l	NH3 mg/l	NO2 mg/l	TKN mg/l	Total ortho mg/l	P ug/l	Chl A ug/l	TSI per 100ml	Colif per 100ml	
Hoodruff	3	A	8/19/93	1.36	5.5	---	---	---	---	3.1	40.0	60.0	69.0	6.0	<0.015	0.051	0.561	0.025	0.004	2.88	8.3	51	4*
Blank	--	--	5/05/92	---	---	---	---	---	---	6.0	---	28.0	<1.0	0.030	0.004	<0.150	<0.004	0.010	<1.00	---	---	---	---
Blank	--	--	5/11/92	---	---	---	---	---	---	7.0	---	19.0	<1.0	0.030	0.004	<0.150	<0.004	0.009	3.68	---	---	---	---
Blank	--	--	5/27/92	---	---	---	---	---	---	6.0	---	1.0	<1.0	0.060	0.470	0.018	<0.004	0.004	3.24	0.3	---	---	---
Blank	--	--	6/11/92	---	---	---	---	---	---	5.0	---	12.0	10.0	<0.050	0.003	<0.150	<0.004	<1.00	0.0	---	---	---	
Blank	--	--	6/13/92	---	---	---	---	---	---	3.0	---	4.0	1.0	<0.015	<0.003	<0.150	<0.004	<1.00	0.5	---	---	---	
Blank	--	--	8/19/92	---	---	---	---	---	---	4.0	---	9.0	<1.0	<0.015	<0.003	<0.295	<0.004	<1.00	0.0	---	---	---	
Blank	--	--	5/04/93	---	---	---	---	---	---	6.0	---	22.0	21.0	<0.015	0.033	<0.150	0.006	0.004	<1.00	0.0	---	---	
Blank	--	--	5/13/93	---	---	---	---	---	---	5.0	18.0	8.0	<1.0	<0.015	<0.003	<0.150	0.017	0.004	<1.00	0.0	---	---	
Blank	--	--	8/16/93	---	---	---	---	---	---	4.0	25.0	10.0	<1.0	<0.015	0.016	0.128	0.006	0.010	1.12	0.3	---	---	
Blank	--	--	8/25/93	---	---	---	---	---	---	4.0	20.0	8.0	<1.0	<0.015	0.013	<0.150	<0.004	0.008	<1.00	0.2	---	---	

\* estimated

\*\* barge traffic between replicate water samples  
n date collected by Auburn University during Phase I Studies.

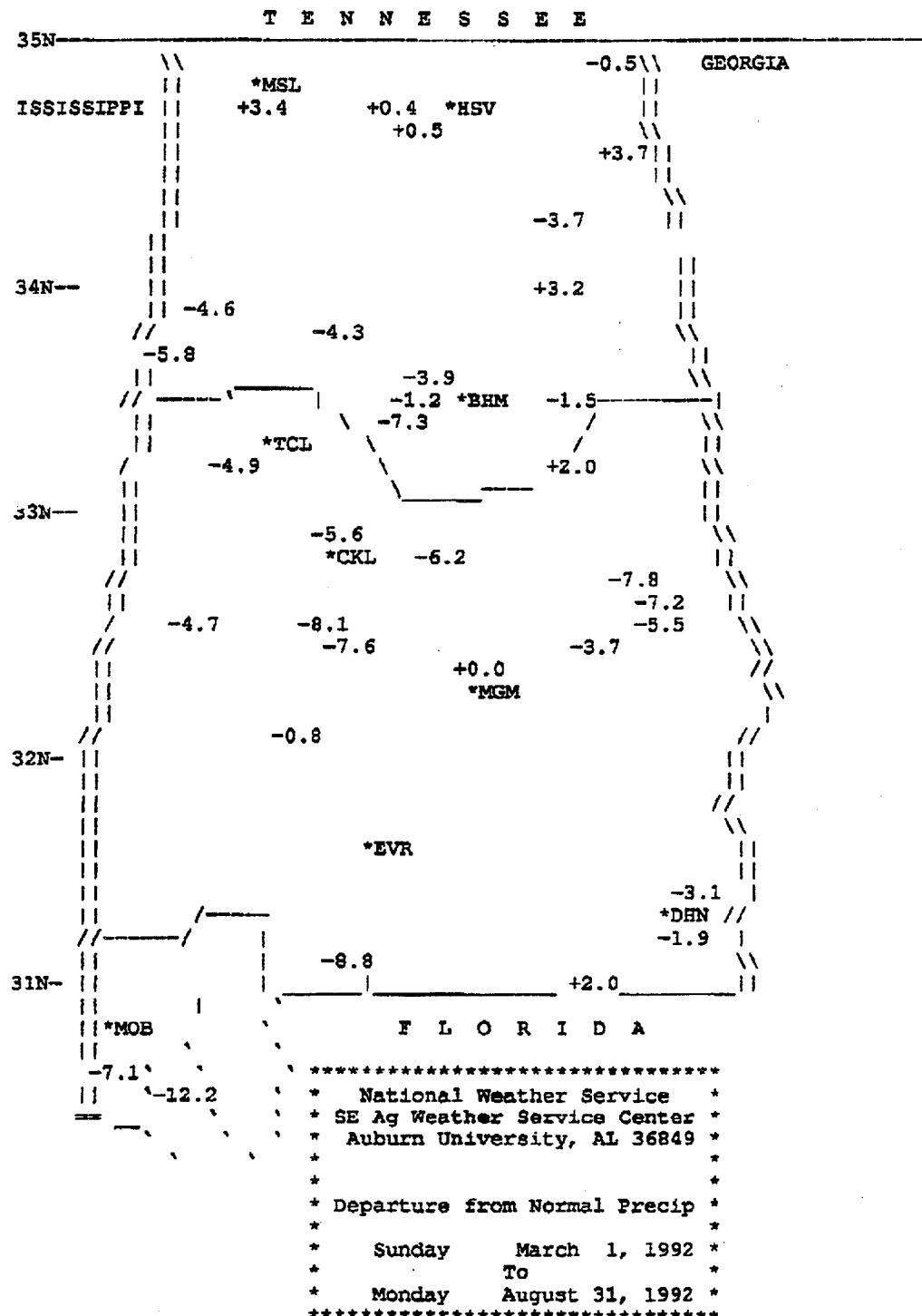
**Appendix B**

**National Weather Service Data**  
**1992-1993**

NATIONAL WEATHER SERVICE  
 SE AGRICULTURAL WEATHER CENTER  
 AUBURN UNIVERSITY, AL  
 WEATHER SUMMARY FOR ALABAMA

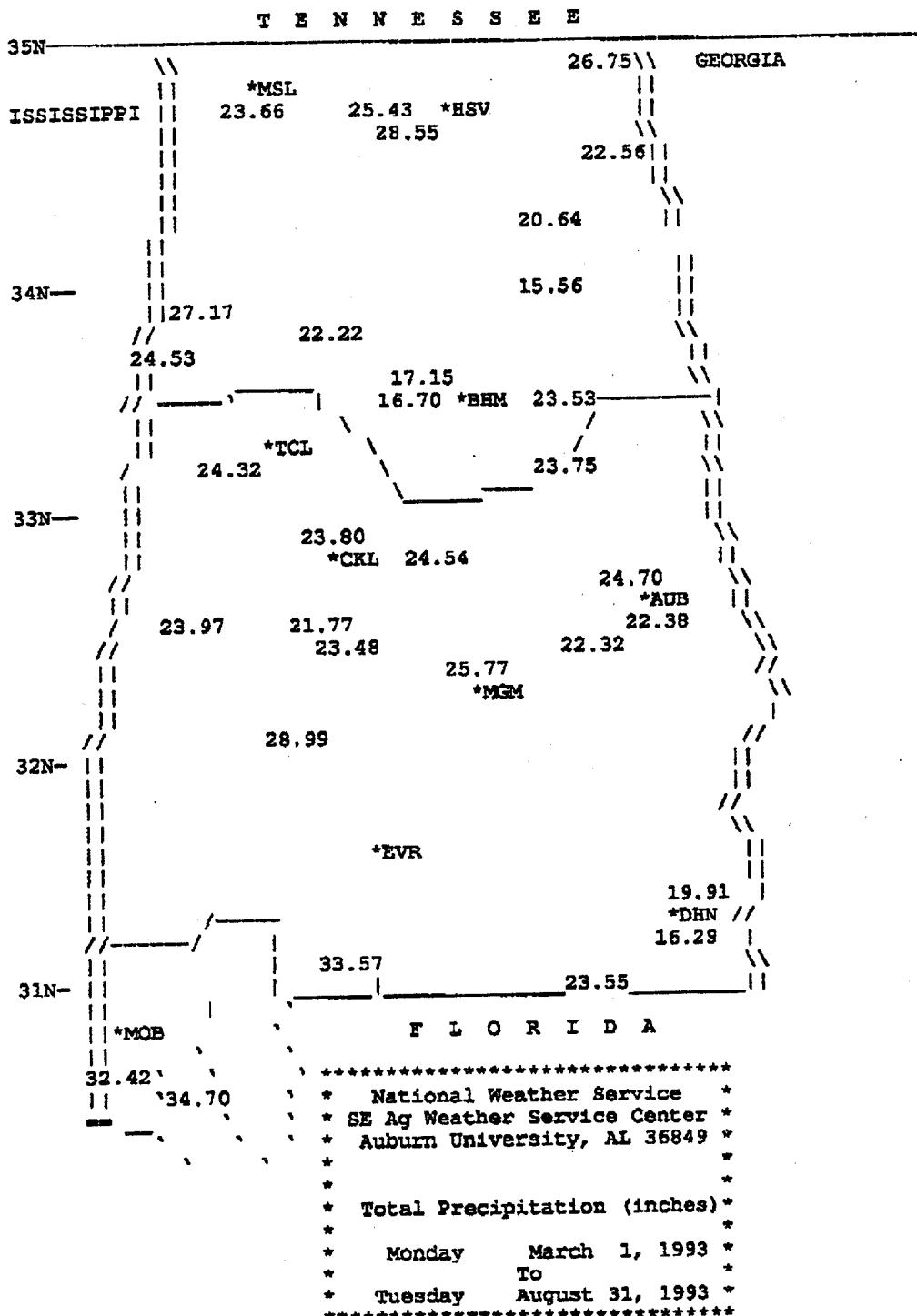
FOR THE PERIOD      Sunday      March 1, 1992 TO      Monday      August 31, 1992

STATION	AIR				NUM DAYS			PRECIPITATION	AVG	
	HI	LO	Avg	DFN	90	100	TOTAL		DFN	DAYS
										SOIL
Anniston	96	25	69	-1	22	0	26.39	-1.50	62	
Ashland	94	23	66	-2	12	0	32.22	+2.02	72	
Auburn	98	25	71	-1	41	0	22.20	-7.17	63	
Auburn_AG	98	25	71	-1	41	0	23.84	-5.53	67	.21
Belle_Mina	95	23	67	-2	16	0	28.36	+0.38	63	
Birmingham_AP	95	25	69	-1	32	0	27.33	-1.24	67	75
Birmingham_City	97	25	70	-1	24	0	21.24	-7.33	55	
Brewton	101	27	71	-1	64	2	26.51	-8.83	62	79
Bridgeport	95	22	66	-2	12	0	29.56	-0.50	64	
Camden	96	28	70	-2	42	0	28.26	-0.82	62	75
Camp_Hill	98	23	68	-3	31	0	22.23	-7.85	58	.19
Centreville	98	27	70	+0	32	0	25.05	-5.59	63	
Demopolis	98	27	70	-2	50	0	23.39	-4.68	53	.20
Dothan	97	32	73	+0	52	0	27.68	-1.93	59	
Fairhope	96	34	73	-1	44	0	23.87	-12.21	65	79
Gadsden	96	25	68	-2	14	0	32.23	+3.24	57	.21
Geneva	95	29	71	-3	31	0	33.13	+2.04	68	69
Headland	98	30	72	-1	54	0	26.71	-3.06	60	73
Huntsville_AG	95	22	68	-1	20	0	29.62	+0.54	63	.21
Jasper	93	23	67	-2	15	0	25.06	-4.26	69	.20
Marion_Junction	95	28	69	-2	30	0	20.04	-8.12	57	76
Milstead	98	29	69	-1	35	0	24.81	-3.74	59	
Mobile	99	34	74	-1	52	0	28.36	-7.12	64	.22
Montgomery	98	30	72	-2	52	0	27.46	+0.01	57	
Muscle_Shoals	95	24	69	-1	27	0	30.71	+3.36	59	
Pinson	95	23	68	-1	31	0	25.36	-3.91	65	
Sand_Mountain	91	21	66	-1	5	0	24.15	-3.73	70	69
Selma	97	29	71	-2	41	0	19.75	-7.57	43	.16
Thorsby	99	25	69	-1	32	0	22.96	-6.22	46	74
Tuscaloosa	97	27	71	-1	47	0	24.09	-4.90	57	.21
Valley_Bead	93	19	65	-1	10	0	33.38	+3.72	84	
Vernon	95	21	68	-2	24	0	23.67	-5.85	46	
Winfield	95	21	67	-1	30	0	24.52	-4.64	53	73
										.22



NATIONAL WEATHER SERVICE  
 SE AGRICULTURAL WEATHER CENTER  
 AUBURN UNIVERSITY, AL  
 WEATHER SUMMARY FOR ALABAMA  
 FOR THE PERIOD Monday March 1, 1993 TO Tuesday August 31, 1993

STATION	AIR TEMPERATURE				NUM DAYS AT OR ABOVE		PRECIPITATION			Avg 4 IN DAILY	Avg SOIL PAN TEMP	Avg EVAP
	HIGH	LOW	Avg	DFN	90	100	TOTAL	DFN	DAYS			
Anniston	100	12	71	+0	65	2	23.53	-4.55	55			
Ashland	99	8	67	-3	48	0	23.75	-4.81	57			
Auburn (AG)	101	15	72	+1	77	1	22.38	-7.19	52	75		.22
Belle Mina	100	12	68	-1	60	1	25.63	-1.40	64	74		
Birmingham Airp	102	2	71	+0	75	8	16.70	-12.30	55			
Brewton	99	17	71	-2	82	0	33.57	-0.88	59			
Bridgeport	98	10	67	-1	57	0	26.75	-1.68	57			
Camden	97	13	71	-2	77	0	28.99	-2.25	54	74		
Camp Hill	100	12	68	-3	70	1	24.70	-5.08	56	77		.20
Centreville	98	15	71	-2	63	0	23.80	-5.59	58			
Demopolis	101	17	71	-1	77	1	23.97	-4.51	50			.20
Dothan	100	22	74	+1	84	1	16.29	-13.61	45			
Fairhope	96	27	73	-2	62	0	34.70	-0.89	66	78		.21
Gadsden	97	11	69	-1	44	0	15.56	-12.68	57			
Geneva	95	20	71	-2	59	0	23.55	-9.00	57	75		
Headland	99	20	71	-2	85	0	19.91	-9.99	46	74		.23
Huntsville (AG)	104	12	70	+1	70	3	28.55	+0.35	60			.21
Jasper	100	9	68	-1	58	2	22.22	-6.54	57			
Marion Junction	98	15	70	-2	66	0	21.77	-6.73	65	76		
Milstead	99	20	70	+0	73	0	22.32	-5.31	56			.26
Mobile	97	21	73	-2	65	0	32.42	-4.43	65			
Montgomery	101	17	73	+0	87	7	25.77	+0.07	58			
Muscle Shoals	102	17	70	+1	67	5	23.66	-2.77	65			
Pinson	102	2	70	+2	76	9	17.15	-11.61	56			
Sand Mountain	97	11	67	-1	40	0	20.64	-6.86	57			.16
Selma	97	19	72	-2	73	0	23.48	-4.76	44			
Thorsby	99	12	70	-1	68	0	24.54	-5.97	52	74		.22
Tuscaloosa	102	13	72	+0	71	4	24.32	-3.67	49			
Valley Head	97	3	65	-1	44	0	22.56	-7.01	65			
Vernon	100	7	68	-3	53	1	24.53	-5.05	45			
Winfield	100	6	67	-3	65	2	27.17	-1.48	56	74		.22



## **Appendix C**

### **ADEM Fish Tissue Monitoring Program 1991-1993**

#### **Sampling Locations**

Station Code: ALA2 Water Body: ALABAMA RIVER RIVER  
 Latitude: 31 33 3.3 N Longitude: 087 30 55.1 W  
 BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
 HUC Code: 03150204 Reach Code: 018 Precision Code: 1  
 Mile: 16.000 COUNTY: 1: MONROE 2:  
 LOCATION: Near City: CLAIBORNE  
 ON UPSTREAM OF ALABAMA HWY 12, US 84 CROSSING AT RIVER MILE 67.0  
 (CLAIBORNE LANDING) BELOW ALABAMA RIVER PULP

Episode Number: 94 13 Date Collected: 12/15/93 Method: EF  
 Collecting Agency: 003 AL DEPT OF CONSERVATION  
 Collector 1: BILL TUCKER 2: GARY SPRAY 3:  
 2:

Station Code: ALA4 Water Body: ALABAMA RIVER RESERVOIR  
 Latitude: 32 23 45.8 N Longitude: 870 02 32.8 W  
 BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
 HUC Code: 03150201 Reach Code: 001 Precision Code: 1  
 Mile: 15.000 COUNTY: 1: DALLAS 2:  
 LOCATION: Near City: SELMA  
 ON ALABAMA RIVER DOWNSTREAM OF SELMA CITY MARINA. RIVER MILE 203 TO  
 204

Episode Number: 94 10 Date Collected: 11/17/93 Method: EF  
 Collecting Agency: 019 ADEM IN CONJUNCTION WITH ADCNR  
 Collector 1: LESLIE/CAT 2: COONER/CAT 3: HIGINBOTHAM/LMB  
 3:

Station Code: ALI1 Water Body: ALICEVILLE RESERVOIR RESERVOIR  
 Latitude: 33 12 45.0 N Longitude: 088 17 13.0 W  
 BASIN: Major: SOUTHEAST Minor: UPPER TOMBIGBEE RIVER  
 HUC Code: 03160106 Reach Code: 023 Precision Code: 1  
 Mile: 2.800 COUNTY: 1: PICKENS 2:  
 LOCATION: Near City: ALICEVILLE  
 ON TOMBIGBEE RIVER, ALICEVILLE RESERVOIR DAM FOREBAY RIVER MILE  
 306.8

Episode Number: 94 16 Date Collected: 10/07/93 Method: EF  
 Collecting Agency: 001 ADEM-MONTGOMERY  
 Collector 1: LESLIE 2: HOUSTON 3:  
 3:

Station Code: BAN1 Water Body: BANKHEAD RESERVOIR RESERVOIR  
 Latitude: 33 27 51.0 N Longitude: 087 21 4.0 W  
 BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
 HUC Code: 03160112 Reach Code: 011 Precision Code: 1  
 Mile: 2.600 COUNTY: 1: TUSCALOOSA 2: JEFFERSON  
 LOCATION: Near City: BURCHFIELD  
 ON UPSTREAM OF BANKHEAD LOCK AND DAM.

Episode Number: 92 07 Date Collected: 10/29/91 Method: EF  
 Collecting Agency: 001 ADEM-MONTGOMERY  
 Collector 1: LESLIE 2: DIGGS 3:  
 3:

Station Code: BAN2 Water Body: BANKHEAD RESERVOIR RESERVOIR  
Latitude: 33 32 47.2 N Longitude: 087 12 9.5 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 31601129 Reach Code: 018 Precision Code: 1  
Mile: 1.900 COUNTY: 1: WALKER 2: JEFFERSON  
LOCATION: Near City: BIRMINGPORT  
ON BANKHEAD RESERVOIR NEAR TAYLOR'S FERRY FISH CAMP APPROX 1.5 MILES  
DOWNSTREAM OF THE CONFLUENCE OF MULBERRY AND LOCUST FORKS, APPROX  
RM 384.0

Episode Number: 92 08 Date Collected: 10/29/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DIGGS 3:

Station Code: BC1 Water Body: BLACK CREEK STREAM  
Latitude: 34 00 55.5 N Longitude: 086 01 54.6 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 047 Precision Code: 1  
Mile: 3.100 COUNTY: 1: ETOWAH 2:  
LOCATION: Near City: GADSDEN  
ON BLACK CREEK, GADSDEN AL. APPROX THE STRETCH OF CREEK FROM  
CHESTNUT STREET TO JUST ABOVE HICKORY STREET. BORDERING GULF  
STATES STEEL. LAT/LONG CALCULATED AT CHESTNUT STREET BRIDGE

Episode Number: 93 48 Date Collected: 08/31/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: BC3 Water Body: BLACK CREEK STREAM  
Latitude: 34 00 16.4 N Longitude: 086 01 43.4 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 047 Precision Code: 1  
Mile: 2.200 COUNTY: 1: ETOWAH 2:  
LOCATION: Near City: GADSDEN  
ON BLACK CREEK, GADSDEN AL. SAMPLING SITE IS A STRETCH OF CREEK FROM  
BC3 DOWN TO GADSDEN LAKE (BLACK CREEK EMBAYMENT)  
APPROX. THE AREA BETWEEN THE HICKORY ST. BRIDGE AND THE BLACK  
CREEK EMBAYMENT.

Episode Number: 93 47 Date Collected: 08/31/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: BEAR1 Water Body: BEAR CREEK RESERVOIR RESERVOIR  
Latitude: 34 23 55.5 N Longitude: 087 59 13.8 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030006 Reach Code: 008 Precision Code: 1  
Mile: 42.000 COUNTY: 1: FRANKLIN 2:  
LOCATION: Near City: ATWOOD  
ON DAM FOREBAY AREA.

Episode Number: 93 26 Date Collected: 10/15/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA/JENKINS 2: CHALK 3: MONTGOMERY

Station Code: BW1 Water Body: BIG WILLS CREEK STREAM  
Latitude: 33 59 26.6 N Longitude: 086 02 44.0 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 048 Precision Code: 1  
Mile: 4.500 COUNTY: 1: ETOWAH 2:  
LOCATION: Near City: GADSDEN  
ON BIG WILLS CREEK AT SUTTON BRIDGE RD IN GADSDEN LAT/LONG WAS CALCULATED AT SUTTON BRIDGE. ACTUAL SAMPLING SITE STRETCHES TO APPROX ONE MILE UPSTREAM.

Episode Number: 93 45 Date Collected: 08/30/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: CED1 Water Body: CEDAR CREEK RESERVOIR RESERVOIR  
Latitude: 34 32 38.5 N Longitude: 087 58 25.3 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030006 Reach Code: 017 Precision Code: 1  
Mile: 8.400 COUNTY: 1: FRANKLIN 2:  
LOCATION: Near City: RUSSELLVILLE  
ON DAM FOREBAY TO ONE MILE UPSTREAM OF THE DAM.

Episode Number: 93 29 Date Collected: 10/16/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA/ G. JENKINS 2: K. CHALK 3:

Station Code: CHOC1 Water Body: CHOCCOLOCCO CREEK STREAM  
Latitude: 33 33 6.0 N Longitude: 086 00 19.0 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 012 Precision Code: 1  
Mile: 4.500 COUNTY: 1: TALLADEGA 2:  
LOCATION: Near City: TALLADEGA  
ON T.17S, R.6E SEC. 15, NW 1/4  
STRETCH OF CREEK 1/4 MILE UPSTREAM AND 3/4 MILE DOWNSTREAM OF CO RD 399 BRIDGE

Episode Number: 93 44 Date Collected: 08/27/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: DIGGS 3:

Station Code: CHOC2 Water Body: CHOCCOLOCCO CREEK STREAM  
Latitude: 33 34 33.4 N Longitude: 085 53 25.9 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 014 Precision Code: 1  
Mile: 2.800 COUNTY: 1: TALLADEGA 2:  
LOCATION: Near City: TALLADEGA  
ON T.17S R.7E SEC 4 NE 1/4 STRETCH OF CREEK FROM IMMEDIATELY DOWNSTREAM OF DRY BRANCH TO 1/2 MILE DOWNSREAM OF THE SOUTHERN RR BRIDGE CROSSING. LAT/LON CALCULATED AT DOWNSTREAM MOST POINT OF THE STRETCH

Episode Number: 93 43 Date Collected: 08/26/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: BERTOLOTTI 2: DAVIES 3: DIGGS

Station Code: CLA1 Water Body: CLAIBORNE RESERVOIR RESERVOIR  
Latitude: 31 36 57.2 N Longitude: 087 33 7.3 W  
BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
HUC Code: 03150204 Reach Code: 034 Precision Code: 1  
Mile: 34.000 COUNTY: 1: MONROE 2:  
LOCATION: Near City: MONROEVILLE  
ON CLAIBORNE RESERVOIR DAM FOREBAY. APPROX. RIVER MILE 73

Episode Number: 94 11 Date Collected: 11/30/93 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: BILL TUCKER 2: GARY SPRAY 3:

Station Code: CLA2 Water Body: CLAIBORNE RESERVOIR RESERVOIR  
Latitude: 31 49 44.4 N Longitude: 087 30 9.1 W  
BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
HUC Code: 03150203 Reach Code: 001 Precision Code: 1  
Mile: 5.000 COUNTY: 1: CLARKE 2: MONROE  
LOCATION: Near City: MONROEVILLE  
ON CLAIBORNE RESERVOIR IN VACINITY OF LOWER PEACHTREE ACCESS AREA AP  
PROX RIVER MILE 96. VERY CLOSE TO THE INTERSECTION OF CLARKE, MON  
ROE AND WILCOX COUNTIES

Episode Number: 94 12 Date Collected: 01/14/94 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: BILL TUCKER 2: GARY SPRAY 3:

Station Code: COF1 Water Body: COFFEEVILLE RESERVOIR RESERVOIR  
Latitude: 31 45 9.0 N Longitude: 088 08 9.0 W  
BASIN: Major: SOUTHEAST Minor: LOWER TOMBIGBEE RIVER  
HUC Code: 03160106 Reach Code: 033 Precision Code: 1  
Mile: 2.000 COUNTY: 1: CHOCTAW 2: CLARKE  
LOCATION: Near City: COFFEEVILLE  
ON TOMBIGBEE RIVER, COFFEEVILLE RESERVOIR DAM FOREBAY IN VACINITY OF  
COFFEEVILLE LAKE PUBLIC USE AREA RIVER MILE 117

Episode Number: 94 20 Date Collected: 10/21/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: COF2 Water Body: COFFEEVILLE RESERVOIR RESERVOIR  
Latitude: 31 57 30.0 N Longitude: 088 04 15.8 W  
BASIN: Major: SOUTHEAST Minor: LOWER TOMBIGBEE RIVER  
HUC Code: 03160201 Reach Code: 008 Precision Code: 1  
Mile: 0.100 COUNTY: 1: CHOCTAW 2: CLARKE  
LOCATION: Near City: COFFEEVILLE  
ON TOMBIGBEE RIVER, COFFEEVILLE RESERVOIR IN VACINITY OF BASHI CREEK  
PUBLIC USE AREA RIVER MILE 145

Episode Number: 94 21 Date Collected: 10/21/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: DANI Water Body: DANIELLY RESERVOIR RESERVOIR  
Latitude: 32 06 55.6 N Longitude: 087 23 53.2 W  
BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
HUC Code: 03150203 Reach Code: 010 Precision Code: 1  
Mile: 5.500 COUNTY: 1: WILCOX 2:  
LOCATION: Near City: CANTON BEND  
ON DAM FOREBAY IN THE VICINITY OF HIGHWAY 28, ALABAMA RIVER MILE 134

Episode Number: 92 04 Date Collected: 10/10/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: LESLIE 3:

Station Code: DAN2 Water Body: DANIELLY RESERVOIR RESERVOIR  
Latitude: 32 03 22.3 N Longitude: 087 15 17.4 W  
BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
HUC Code: 03150203 Reach Code: 010 Precision Code: 1  
Mile: 22.500 COUNTY: 1: WILCOX 2:  
LOCATION: Near City: CAMDEN  
ON IN THE VICINITY OF ROLAND COOPER STATE PARK, ALABAMA RIVER MILE 151

Episode Number: 92 03 Date Collected: 10/09/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: LESLIE 3:

Station Code: DEM1 Water Body: DEMOPOLIS RESERVOIR RESERVOIR  
Latitude: 32 31 8.8 N Longitude: 087 52 19.1 W  
BASIN: Major: SOUTHEAST Minor: LOWER TOMBIGBEE RIVER  
HUC Code: 03160201 Reach Code: 033 Precision Code: 1  
Mile: 13.300 COUNTY: 1: MARENGO 2: SUMTER  
LOCATION: Near City: DEMOPOLIS  
ON DAM FOREBAY AREA DOWNSTREAM OF DEMOPOLIS - TOMBIGBEE RIVER MILE 213

Episode Number: 92 05 Date Collected: 10/24/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: COONER 2: LESLIE 3:

Station Code: DEM2 Water Body: DEMOPOLIS RESERVOIR RESERVOIR  
Latitude: 32 32 40.9 N Longitude: 087 49 24.5 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160113 Reach Code: 001 Precision Code: 1  
Mile: 2.350 COUNTY: 1: MARENGO 2: GREENE  
LOCATION: Near City: DEMOPOLIS  
ON BLACK WARRIOR EMBAYMENT AREA NEAR U.S. HIGHWAY 43 CROSSING, BLACK WARRIOR RIVER MILE 213.

Episode Number: 92 06 Date Collected: 10/24/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: COONER 2: LESLIE 3:

Station Code: FJAC1 Water Body: LAKE FRANK JACKSON RESERVOIR  
Latitude: 31 17 54.0 N Longitude: 086 16 57.0 W  
BASIN: Major: SOUTHEAST Minor: CHOCTAWATCHEE RIVER  
HUC Code: 03140103 Reach Code: 032 Precision Code: 1  
Mile: 7.600 COUNTY: 1: COVINGTON 2:  
LOCATION: Near City: OPP  
ON LIGHTWOOD KNOT CREEK, FRANK JACKSON RESERVOIR  
LAKE WIDE SAMPLE, FRANK JACKSON STATE PARK, OPP, ALABAMA  
LAT. LONG. CALCULATED AT DAM FORBAY

Episode Number: 94 26 Date Collected: 10/14/93 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: NEWMAN 2: WEATHERS 3: HAMILTON

Station Code: GAI1 Water Body: GAINESVILLE RESERVOIR RESERVOIR  
Latitude: 32 51 0.0 N Longitude: 088 09 20.0 W  
BASIN: Major: SOUTHEAST Minor: UPPER TOMBIGBEE RIVER  
HUC Code: 03160106 Reach Code: 009 Precision Code: 1  
Mile: 2.600 COUNTY: 1: GREENE 2: SUMTER  
LOCATION: Near City: GAINESVILLE  
ON TOMBIGBEE RIVER, GAINESVILLE RESERVOIR DAM FOREBAY RIVER MILE  
266.1

Episode Number: 94 17 Date Collected: 10/05/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: HOUSTON 3:

Station Code: GAI2 Water Body: GAINESVILLE RESERVOIR RESERVOIR  
Latitude: 32 57 39.4 N Longitude: 088 09 28.7 W  
BASIN: Major: SOUTHEAST Minor: UPPER TOMBIGBEE RIVER  
HUC Code: 03160106 Reach Code: 011 Precision Code: 1  
Mile: 6.300 COUNTY: 1: GREENE 2: SUMTER  
LOCATION: Near City: GAINESVILLE  
ON TOMBIGBEE RIVER, GAINESVILLE RESERVOIR IN VACINITY OF BARNES BEND  
AND BARNES BEND ACCCESS AREA RIVER MILE 278.5

Episode Number: 94 18 Date Collected: 10/05/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: DIGGS 3:

Station Code: GAI3 Water Body: GAINESVILLE RESERVOIR RESERVOIR  
Latitude: 33 05 0.0 N Longitude: 088 15 51.5 W  
BASIN: Major: SOUTHEAST Minor: UPPER TOMBIGBEE RIVER  
HUC Code: 03160106 Reach Code: 021 Precision Code: 1  
Mile: 0.001 COUNTY: 1: PICKENS 2:  
LOCATION: Near City: GAINESVILLE  
ON TOMBIGBEE RIVER, GAINESVILLE RESERVOIR IN VACINITY OF COCHRANE  
RECREATION AREA RIVER MILE 295

Episode Number: 94 19 Date Collected: 10/06/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: HOUSTON 3:

Station Code: GEO1 Water Body: W.F. GEORGE RESERVOIR RESERVOIR  
Latitude: 31 37 59.7 N Longitude: 085 04 2.7 W  
BASIN: Major: SOUTHEAST Minor: CHATTAHOOCHEE RIVER  
HUC Code: 03130003 Reach Code: 001 Precision Code: 1  
Mile: 0.800 COUNTY: 1: HENRY 2: HENRY  
LOCATION: Near City: EUFAULA  
ON WALTER F. GEORGE RESERVOIR, DAM FOREBAY APPROX. RIVER MILE 76 CHA  
TTAHOOCHEE RIVER

Episode Number: 94 02 Date Collected: 10/21/93 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: NEWMAN 2: WEATHERS 3: HAMILTON

Station Code: GEO2 Water Body: W.F. GEORGE RESERVOIR RESERVOIR  
Latitude: 31 48 36.4 N Longitude: 085 07 55.5 W  
BASIN: Major: SOUTHEAST Minor: CHATTAHOOCHEE RIVER  
HUC Code: 03130003 Reach Code: 011 Precision Code: 1  
Mile: 6.200 COUNTY: 1: BARBOUR 2:  
LOCATION: Near City: EUFAULA  
ON CHATTAHOOCHEE RIVER DOWNSTREAM OF CHENEYHATCHEE AND BARBOUR CREEK  
S LAT. LON. CALCULATED AT RIVER MILE 91

Episode Number: 94 04 Date Collected: 10/20/93 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: WEATHERS 2: NEWMAN 3: HAMILTON

Station Code: GEO3 Water Body: W.F. GEORGE RESERVOIR RESERVOIR  
Latitude: 31 58 4.4 N Longitude: 085 05 46.4 W  
BASIN: Major: SOUTHEAST Minor: CHATTAHOOCHEE RIVER  
HUC Code: 03130003 Reach Code: 013 Precision Code: 1  
Mile: 0.100 COUNTY: 1: BARBOUR 2:  
LOCATION: Near City: EUFAULA  
ON COWIKEE CREEK EMBAYMENT OF W F GEORGE RESERVOIR. APPROX. AREA FRO  
M US 431 BRIDGE TO CHATTAHOOCHEE MAIN CHANNEL. IN VACINITY OF LAK  
E POINT RESORT AND STATE PARK

Episode Number: 94 03 Date Collected: 11/09/93 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: NEWMAN 2: WEATHERS 3: HAMILTON

Station Code: GL1 Water Body: GADSDENLAKE/BLACK CREEK RESERVOIR  
Latitude: 33 59 43.6 N Longitude: 086 01 12.7 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 047 Precision Code: 1  
Mile: 1.200 COUNTY: 1: ETOWAH 2:  
LOCATION: Near City: GADSDEN  
ON GADSDEN LAKE/NEELY HENRY RESERVOIR, BLACK CREEK ENBAYMENT. NORTH  
SIDE OF I759 IN GADSDEN

Episode Number: 93 46 Date Collected: 08/31/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: GUN1 Water Body: GUNTERSVILLE RESERVOIR RESERVOIR  
Latitude: 34 25 25.6 N Longitude: 086 22 28.1 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030001 Reach Code: 001 Precision Code: 1  
Mile: 2.800 COUNTY: 1: MARSHALL 2:  
LOCATION: Near City: GUNTERSVILLE  
ON TENNESSEE RIVER MILE 350, DOWNSTREAM OF HONEYCOMB CREEK AND  
UPSTREAM OF THE DAM

Episode Number: 93 58 Date Collected: 10/22/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: HAR1 Water Body: HARDING RESERVOIR RESERVOIR  
Latitude: 32 39 56.1 N Longitude: 085 05 29.4 W  
BASIN: Major: SOUTHEAST Minor: CHATTAHOOCHEE RIVER  
HUC Code: 03130002 Reach Code: 012 Precision Code: 1  
Mile: 0.001 COUNTY: 1: LEE 2: HARRIS, GA  
LOCATION: Near City: OPELIKA  
ON LAKE HARDING AT HALAWAKEE CREEK EMBAYMENT. LAT/LONG WAS CALCULATED  
AT THE CONFLUENCE OF HALAWAKEE CREEK WITH THE MAIN CHANNEL.

Episode Number: 93 12 Date Collected: 10/27/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: HAR2 Water Body: HARDING RESERVOIR RESERVOIR  
Latitude: 32 43 0.5 N Longitude: 085 07 19.9 W  
BASIN: Major: SOUTHEAST Minor: CHATTAHOOCHEE RIVER  
HUC Code: 03130002 Reach Code: 013 Precision Code: 1  
Mile: 0.001 COUNTY: 1: LEE 2: HARRIS, GA  
LOCATION: Near City: OPELIKA  
ON LAKE HARDING AT OSANIPPA CREEK EMBAYMENT. LAT/LONG WAS CALCULATED  
AT THE CONFLUENCE OF THE CREEK WITH THE MAIN CHANNEL.

Episode Number: 93 13 Date Collected: 10/28/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: HOL1 Water Body: HOLT RESERVOIR RESERVOIR  
Latitude: 33 15 16.4 N Longitude: 087 26 42.8 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160112 Reach Code: 008 Precision Code: 1  
Mile: 0.900 COUNTY: 1: TUSCALOOSA 2:  
LOCATION: Near City: TUSCALOOSA  
ON FOREBAY AREA, DOWNSTREAM OF DEERLICK CREEK PUBLIC ACCESS AREA,  
COES RIVER MILE 347.0-348.0

Episode Number: 93 22 Date Collected: 12/03/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: SHOEMAKER 3:

Station Code: HOL2 Water Body: HOLT RESERVOIR RESERVOIR  
Latitude: 33 23 27.8 N Longitude: 087 24 4.4 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160112 Reach Code: 008 Precision Code: 1  
Mile: 13.700 COUNTY: 1: TUSCALOOSA 2:  
LOCATION: Near City: TUSCALOOSA  
ON UPSTREAM OF OLD LOCK 15 PUBLIC ACCESS AREA AT COES RIVER MILE 360

Episode Number: 93 23 Date Collected: 12/04/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: SHOEMAKER 3:

Station Code: JAC1 Water Body: LAKE JACKSON OTHER  
Latitude: 31 00 0.0 N Longitude: 086 19 32.0 W  
BASIN: Major: SOUTHEAST Minor: CHOCTAWATCHEE RIVER  
HUC Code: 03140103 Reach Code: 022 Precision Code: 1  
Mile: 16.500 COUNTY: 1: COVINGTON 2:  
LOCATION: Near City: FLORALA  
OFF LAKE JACKSON LOCATED ON THE ALABAMA/FLORIDA STATE LINE AT FLORALA  
ALABAMA (TRUE LAKE)

Episode Number: 94 25 Date Collected: 10/27/93 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: WEATHERS 2: HAMILTON 3:

Station Code: JON1 Water Body: JONES BLUFF RESERVOIR RESERVOIR  
Latitude: 32 20 46.1 N Longitude: 086 46 26.5 W  
BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
HUC Code: 03150203 Reach Code: 022 Precision Code: 1  
Mile: 3.800 COUNTY: 1: AUTAUGA 2: LOWNDES  
LOCATION: Near City: EDSONS  
ON IN THE VICINITY OF PRAIRIE CREEK ACCESS AREA NEAR THE DAM FOREBAY  
AT ALABAMA RIVER MILE 237

Episode Number: 92 01 Date Collected: 10/01/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DIGGS 3: DAVIES

Station Code: JON2 Water Body: JONES BLUFF RESERVOIR RESERVOIR  
Latitude: 32 24 6.4 N Longitude: 086 38 46.4 W  
BASIN: Major: SOUTHEAST Minor: ALABAMA RIVER  
HUC Code: 03150203 Reach Code: 022 Precision Code: 1  
Mile: 21.000 COUNTY: 1: AUTAUGA 2: LOWNDES  
LOCATION: Near City: AUTAUGAVILLE  
ON DOWNSTREAM OF SWIFT CREEK ACCESS AREA, ALABAMA RIVER MILE 255

Episode Number: 92 02 Date Collected: 10/03/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DIGGS 3: DAVIES

Station Code: JOR1 Water Body: JORDAN RESERVOIR RESERVOIR  
Latitude: 32 37 38.1 N Longitude: 086 16 12.0 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 010 Precision Code: 1  
Mile: 0.001 COUNTY: 1: ELMORE 2:  
LOCATION: Near City: WETUMPKA  
ON JORDAN DAM FOREBAY TO ALABAMA POWER RESERVOIR MILE 1.0, IN THE VICINITY OF BOULDIN CANAL.

Episode Number: 93 01 Date Collected: 10/13/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3: HOUSTON

Station Code: JOR2 Water Body: JORDAN RESERVOIR RESERVOIR  
Latitude: 32 38 41.1 N Longitude: 086 17 59.3 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 010 Precision Code: 1  
Mile: 2.000 COUNTY: 1: ELMORE 2:  
LOCATION: Near City: HOLTVILLE  
ON ALABAMA POWER RESERVOIR MILE 3.0-4.0, IN THE VICINITY OF SHOALS CREEK

Episode Number: 93 02 Date Collected: 10/13/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE/DAVIES 2: HOUSTON 3: AL DCNR, G&F

Station Code: LAY1 Water Body: LAY RESERVOIR RESERVOIR  
Latitude: 32 58 31.4 N Longitude: 086 30 49.1 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 040 Precision Code: 1  
Mile: 1.000 COUNTY: 1: COOSA 2: CHILTON  
LOCATION: Near City: CLANTON  
ON DAM FOREBAY AREA TO ALABAMA POWER RESERVOIR MILE 1.0

Episode Number: 92 09 Date Collected: 11/06/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: LAY1 Water Body: LAY RESERVOIR RESERVOIR  
Latitude: 32 58 31.4 N Longitude: 086 30 49.1 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 040 Precision Code: 1  
Mile: 1.000 COUNTY: 1: COOSA 2: CHILTON  
LOCATION: Near City: CLANTON  
ON DAM FOREBAY AREA TO ALABAMA POWER RESERVOIR MILE 1.0

Episode Number: 93 08 Date Collected: 11/03/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE/DAVIES 2: SHOEMAKER 3: AL DCNR, G&F

Station Code: LAY2 Water Body: LAY RESERVOIR RESERVOIR  
Latitude: 33 06 22.8 N Longitude: 086 29 21.3 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 050 Precision Code: 1  
Mile: 2.000 COUNTY: 1: TALLADEGA 2: SHELBY  
LOCATION: Near City: TALLADEGA SPRINGS  
ON IN THE VICINITY OF PECKERWOOD CREEK; ALABAMA POWER RESERVOIR MILE  
12.0-13.0

Episode Number: 92 10 Date Collected: 11/06/91 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3:

Station Code: LAY2 Water Body: LAY RESERVOIR RESERVOIR  
Latitude: 33 06 22.8 N Longitude: 086 29 21.3 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 050 Precision Code: 1  
Mile: 2.000 COUNTY: 1: TALLADEGA 2: SHELBY  
LOCATION: Near City: TALLADEGA SPRINGS  
ON IN THE VICINITY OF PECKERWOOD CREEK; ALABAMA POWER RESERVOIR MILE  
12.0-13.0

Episode Number: 93 09 Date Collected: 11/03/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3: SHOEMAKER

Station Code: LBEA1 Water Body: LITTLE BEAR CREEK RES. RESERVOIR  
Latitude: 34 27 17.6 N Longitude: 087 58 41.7 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030006 Reach Code: 016 Precision Code: 1  
Mile: 11.100 COUNTY: 1: FRANKLIN 2:  
LOCATION: Near City: RED BAY  
ON DAM FOREBAY AREA.

Episode Number: 93 28 Date Collected: 10/13/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA/G. JENKINS 2: K. CHALK 3: J. MONTGOMERY

Station Code: LOG1 Water Body: LOGAN MARTIN RESERVOIR RESERVOIR  
Latitude: 33 25 38.3 N Longitude: 086 20 1.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 006 Precision Code: 1  
Mile: 2.300 COUNTY: 1: TALLADEGA 2: ST. CLAIR  
LOCATION: Near City: PELL CITY  
ON LOGAN MARTIN DAM FOREBAY AREA TO ALABAMA POWER RESERVOIR MILE 1.0

Episode Number: 93 14 Date Collected: 11/20/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: COONER 2: LESLIE 3: SHOEMAKER

Station Code: LOG2 Water Body: LOGAN MARTIN RESERVOIR RESERVOIR  
Latitude: 33 35 38.3 N Longitude: 086 11 3.4 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 019 Precision Code: 1  
Mile: 5.100 COUNTY: 1: TALLADEGA 2: ST. CLAIR  
LOCATION: Near City: RIVERSIDE  
ON LOGAN MARTIN AT RIVERSIDE NEAR THE CONFLUENCE OF BLUE EYE CREEK,  
ALABAMA POWER RESERVOIR MILE 20.0

Episode Number: 93 15 Date Collected: 11/20/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: COONER 2: LESLIE 3: SHOEMAKER

Station Code: LOG3 Water Body: LOGAN MARTIN RESERVOIR RESERVOIR  
Latitude: 33 42 46.4 N Longitude: 086 07 10.4 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 023 Precision Code: 1  
Mile: 1.300 COUNTY: 1: CALHOUN 2: ST. CLAIR  
LOCATION: Near City: RAGLAND  
ON LOGAN MARTIN AT RAGLAND NEAR CONFLUENCE OF AKER CREEK, ALABAMA  
POWER RESERVOIR MILE 40.0

Episode Number: 93 16 Date Collected: 11/23/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3: HOUSTON

Station Code: MAR1 Water Body: MARTIN RESERVOIR RESERVOIR  
Latitude: 32 41 20.1 N Longitude: 085 54 37.0 W  
BASIN: Major: SOUTHEAST Minor: TALLAPOOSA RIVER  
HUC Code: 03150110 Reach Code: 035 Precision Code: 1  
Mile: 4.500 COUNTY: 1: ELMORE 2: TALLAPOOSA  
LOCATION: Near City: RED HILL  
ON DAM FOREBAY, NEAR GOAT ISLAND

Episode Number: 92 18 Date Collected: 11/05/91 Method: GN  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: MCHUGH 2: HIGGINBOTHAM 3:

Station Code: MAR2 Water Body: MARTIN RESERVOIR RESERVOIR  
Latitude: 32 50 6.3 N Longitude: 085 52 42.0 W  
BASIN: Major: SOUTHEAST Minor: TALLAPOOSA RIVER  
HUC Code: 03150109 Reach Code: 015 Precision Code: 1  
Mile: 2.600 COUNTY: 1: TALLAPOOSA 2:  
LOCATION: Near City: OUR TOWN  
ON RESERVOIR MILE 13-14, MAIN RIVER CHANNEL DOWNSTREAM OF WIND AND  
ELKAHATCHEE CREEKS

Episode Number: 92 19 Date Collected: 10/30/91 Method: GN  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: MCHUGH 2: HIGGINBOTHAM 3:

Station Code: MIT1 Water Body: MITCHELL RESERVOIR RESERVOIR  
Latitude: 32 48 45.0 N Longitude: 086 26 59.6 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 018 Precision Code: 1  
Mile: 3.900 COUNTY: 1: CHILTON 2: COOSA  
LOCATION: Near City: VERBENA  
ON DAM FOREBAY TO 1 MILE UPSTREAM OF DAM

Episode Number: 92 17 Date Collected: 10/15/91 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: MCHUGH 2: MOORE 3:

Station Code: MIT2 Water Body: MITCHELL RESERVOIR RESERVOIR  
Latitude: 32 51 4.1 N Longitude: 086 26 48.6 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150107 Reach Code: 036 Precision Code: 1  
Mile: 0.001 COUNTY: 1: CHILTON 2: COOSA  
LOCATION: Near City: CLANTON  
ON CONFLUENCE OF HATCHET CREEK WITH THE MAIN CHANNEL, AT RESERVOIR  
MILE 5

Episode Number: 92 16 Date Collected: 10/15/91 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: MCHUGH 2: MOORE 3:

Station Code: NEE1 Water Body: NEELY HENRY RESERVOIR RESERVOIR  
Latitude: 33 47 4.2 N Longitude: 086 03 12.9 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 037 Precision Code: 1  
Mile: 1.700 COUNTY: 1: CALHOUN 2: ST. CLAIR  
LOCATION: Near City: GADSDEN  
ON DAM FOREBAY TO ALABAMA POWER RESERVOIR MILE 1.0

Episode Number: 93 17 Date Collected: 11/18/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: MCCARTHA 3:

Station Code: NEE2 Water Body: NEELY HENRY RESERVOIR RESERVOIR  
Latitude: 33 58 41.1 N Longitude: 085 59 52.5 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 040 Precision Code: 1  
Mile: 16.500 COUNTY: 1: ETOWAH 2:  
LOCATION: Near City: GADSDEN  
ON DOWNSTREAM VICINITY OF THE CONFLUENCE OF BIG WILLS CREEK AND  
BLACK CREEKS WITH THE MAIN CHANNEL, AT APPROXIMATELY ALABAMA  
POWER RESERVOIR MILE 23.0-24.0

Episode Number: 93 18 Date Collected: 11/18/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DIGGS 3:

Station Code: NEE3 Water Body: NEELY HENRY RESERVOIR RESERVOIR  
Latitude: 34 06 45.7 N Longitude: 085 51 14.5 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150106 Reach Code: 043 Precision Code: 1  
Mile: 22.600 COUNTY: 1: ETOWAH 2:  
LOCATION: Near City: MURRYCROSS  
ON NEELY HENRY AT CROFT FERRY, ALABAMA POWER RESERVOIR MILE 54

Episode Number: 93 07 Date Collected: 12/01/92 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: CATCHINGS 2: FLOYD 3:

Station Code: OLI1 Water Body: OLIVER RESERVOIR RESERVOIR  
Latitude: 33 12 52.5 N Longitude: 087 34 18.3 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160112 Reach Code: 001 Precision Code: 1  
Mile: 1.700 COUNTY: 1: TUSCALOOSA 2:  
LOCATION: Near City: TUSCALOOSA  
ON OLIVER DAM FOREBAY. COES RIVER MILE 338.0-339.0. LAT/LONG WAS CALCULATED AT RM 339.0

Episode Number: 93 20 Date Collected: 12/02/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: DIGGS 3:

Station Code: OLI2 Water Body: OLIVER RESERVOIR RESERVOIR  
Latitude: 33 15 4.7 N Longitude: 087 28 59.8 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160112 Reach Code: 002 Precision Code: 1  
Mile: 1.300 COUNTY: 1: TUSCALOOSA 2:  
LOCATION: Near City: TUSCALOOSA  
ON COES RIVER MILE 344.0-345.0. LAT/LONG WAS CALCULATED AT RM 345.0

Episode Number: 93 21 Date Collected: 12/02/92 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: DIGGS 3:

Station Code: PIC4 Water Body: PICKWICK RESERVOIR RESERVOIR  
Latitude: 34 53 48.9 N Longitude: 088 00 55.7 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 019 Precision Code: 1  
Mile: 2.500 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: WATERLOO  
ON 2.5 MILES UPSTREAM OF SECOND CREEK AT TRM 230.0

Episode Number: 92 22 Date Collected: 10/30/91 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: MITCHELL 2: JAMES 3:

Station Code: PIC4 Water Body: PICKWICK RESERVOIR RESERVOIR  
Latitude: 34 53 48.9 N Longitude: 088 00 55.7 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 019 Precision Code: 1  
Mile: 2.500 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: WATERLOO  
ON 2.5 MILES UPSTREAM OF SECOND CREEK AT TRM 230.0

Episode Number: 92 67 Date Collected: 09/16/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: PIC8 Water Body: PICKWICK RESERVOIR RESERVOIR  
Latitude: 34 44 35.0 N Longitude: 087 44 47.6 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 035 Precision Code: 1  
Mile: 1.600 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: SHEFFIELD  
ON PICKWICK RESERVOIR ON THE TENNESSEE RIVER AT TRM 251.0 TO 255.0  
NEAR SHEFFIELD, AL

Episode Number: 92 62 Date Collected: 10/29/91 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: PIC9 Water Body: PICKWICK RESERVOIR RESERVOIR  
Latitude: 34 48 8.3 N Longitude: 087 38 3.0 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 4.000 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON CLOSE TO WILSON DAM TAILRACE AT TRM 259.0

Episode Number: 92 23 Date Collected: 01/29/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: MITCHELL 2: JAMES 3:

Station Code: PIC9 Water Body: PICKWICK RESERVOIR RESERVOIR  
Latitude: 34 48 8.3 N Longitude: 087 38 3.0 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 4.000 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON CLOSE TO WILSON DAM TAILRACE AT TRM 259.0

Episode Number: 92 66 Date Collected: 09/15/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: RLH1 Water Body: R.L. HARRIS RESERVOIR RESERVOIR  
Latitude: 33 15 31.3 N Longitude: 085 36 56.7 W  
BASIN: Major: SOUTHEAST Minor: TALLAPOOSA RIVER  
HUC Code: 03150109 Reach Code: 040 Precision Code: 1  
Mile: 0.900 COUNTY: 1: RANDOLPH 2:  
LOCATION: Near City: WEDOWEE  
ON R.L. HARRIS RESERVOIR DAM FOREBAY. APPROX. ONE MILE UPSTREAM OF CROOKED CREEK.

Episode Number: 94 14 Date Collected: 09/29/93 Method: EF  
Collecting Agency: 019 ADEM IN CONJUNCTION WITH ADCNR  
Collector 1: LESLIE 2: DIGGS 3:

Station Code: RLH2 Water Body: R.L. HARRIS RESERVOIR RESERVOIR  
Latitude: 33 20 57.0 N Longitude: 085 32 42.0 W  
BASIN: Major: SOUTHEAST Minor: TALLAPOOSA RIVER  
HUC Code: 03150108 Reach Code: 001 Precision Code: 1  
Mile: 7.200 COUNTY: 1: RANDOLPH 2:  
LOCATION: Near City: WEDOWEE  
ON HARRIS RESERVOIR, LITTLE TALLAPOOSA RIVER AT CO.RD. 29 SUNKEN BRIDGE. APPROX. SEVEN MILES UPSTREAM OF LITTLE TALLAPOOSA, TALLAPOOSA CONFLUENCE.

Episode Number: 94 15 Date Collected: 09/29/93 Method: EF  
Collecting Agency: 019 ADEM IN CONJUNCTION WITH ADCNR  
Collector 1: LESLIE 2: DIGGS 3:

Station Code: SM11 Water Body: LEWIS SMITH RESERVOIR RESERVOIR  
Latitude: 34 02 9.7 N Longitude: 087 01 58.3 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160110 Reach Code: 011 Precision Code: 1  
Mile: 12.200 COUNTY: 1: CULLMAN 2:  
LOCATION: Near City: JASPER  
ON RYAN CREEK, LEWIS SMITH RESERVOIR APPROX. 2.2 MILES UPSTREAM OF BIG BRIDGE AND APPROX. 12 MILES UPSTREAM OF SIPSEY FORK.

Episode Number: 94 05 Date Collected: 10/26/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: DIGGS 3:

Station Code: SMI2 Water Body: LEWIS SMITH RESERVOIR RESERVOIR  
Latitude: 34 01 18.1 N Longitude: 087 07 23.5 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160110 Reach Code: 014 Precision Code: 1  
Mile: 5.000 COUNTY: 1: WINSTON 2:  
LOCATION: Near City: JASPER  
ON ROCK CREEK, LEWIS SMITH RESERVOIR IN VACINITY OF LITTLE CROOKED CREEK AND ROCK CREEK MARINA. APPROX. FIVE MILES UPSTREAM FROM SIPSEY FORK.

Episode Number: 94 06 Date Collected: 10/26/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: COONER 3:

Station Code: SMI3 Water Body: LEWIS SMITH RESERVOIR RESERVOIR  
Latitude: 34 01 39.2 N Longitude: 087 14 47.9 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160110 Reach Code: 045 Precision Code: 1  
Mile: 0.001 COUNTY: 1: WINSTON 2:  
LOCATION: Near City: JASPER  
ON LEWIS SMITH RESERVOIR- MOUTH OF CLEAR CREEK, MOUTH OF BUTLER CREEK,  
K, SIPSEY FORK IN VACINITY OF CLEAR AND BUTLER CREEKS. 2.3 MILES  
UPSTREAM OF STATE RT. 257 BRIDGE.

Episode Number: 94 07 Date Collected: 10/28/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: DIGGS 3:

Station Code: THU1 Water Body: THURLOW RESERVOIR RESERVOIR  
Latitude: 32 32 17.6 N Longitude: 085 53 14.2 W  
BASIN: Major: SOUTHEAST Minor: TALLAPOOSA RIVER  
HUC Code: 03150110 Reach Code: 030 Precision Code: 1  
Mile: 0.700 COUNTY: 1: ELMORE 2: TALLAPOOSA  
LOCATION: Near City: TALLASSEE  
ON DAM FOREBAY RESERVOIR MILE 0-1.0

Episode Number: 93 11 Date Collected: 10/15/92 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: MCHUGH 2: HIGGINBOTHAM 3:

Station Code: UBEA1 Water Body: UPPER BEAR CREEK RES. RESERVOIR  
Latitude: 34 16 23.9 N Longitude: 087 41 31.8 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030006 Reach Code: 009 Precision Code: 1  
Mile: 11.700 COUNTY: 1: MARION 2:  
LOCATION: Near City: BEAR CREEK  
ON DAM FOREBAY AREA.

Episode Number: 93 27 Date Collected: 10/14/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA/G. JENKINS 2: K. CHALK 3: J. MONTGOMERY

Station Code: WAR1 Water Body: WARRIOR LAKE RESERVOIR  
Latitude: 32 46 52.7 N Longitude: 087 50 9.2 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160113 Reach Code: 011 Precision Code: 1  
Mile: 34.000 COUNTY: 1: GREENE 2: HALE  
LOCATION: Near City: EUTAW  
ON WARRIOR LAKE DAM FOREBAY APPROX RIVER MILE 263

Episode Number: 94 08 Date Collected: 10/13/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: DAVIES 2: HOUSTON 3:

Station Code: WAR2 Water Body: WARRIOR LAKE RESERVOIR  
Latitude: 32 53 42.7 N Longitude: 087 46 58.7 W  
BASIN: Major: SOUTHEAST Minor: WARRIOR RIVER  
HUC Code: 03160113 Reach Code: 022 Precision Code: 1  
Mile: 7.600 COUNTY: 1: GREENE 2: HALE  
LOCATION: Near City: EUTAW  
ON WARRIOR LAKE IN VICINITY OF LOCK 8 PUBLIC USE AREA APPROX. RIVER  
MILE 278

Episode Number: 94 09 Date Collected: 10/13/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DIGGS 3:

Station Code: WEI1 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 10 35.8 N Longitude: 085 45 13.0 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 007 Precision Code: 1  
Mile: 5.900 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: LEESBURG BRIDGE  
ON WEISS RESERVOIR AT LEESBURG BRIDGE, ALABAMA POWER RESERVOIR MILE  
1.0

Episode Number: 92 11 Date Collected: 11/12/91 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: FLOYD 2: PAUL 3: HAINS

Station Code: WEI1 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 10 35.8 N Longitude: 085 45 13.0 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 007 Precision Code: 1  
Mile: 5.900 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: LEESBURG BRIDGE  
ON WEISS RESERVOIR AT LEESBURG BRIDGE, ALABAMA POWER RESERVOIR MILE  
1.0

Episode Number: 93 04 Date Collected: 11/06/92 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: FLOYD 2: PAUL 3:

Station Code: WEI1 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 10 35.8 N Longitude: 085 45 13.0 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 007 Precision Code: 1  
Mile: 5.900 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: LEESBURG BRIDGE  
ON WEISS RESERVOIR AT LEESBURG BRIDGE, ALABAMA POWER RESERVOIR MILE  
1.0

Episode Number: 94 22 Date Collected: 11/03/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3: HOUSTON

Station Code: WEI2 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 12 54.1 N Longitude: 085 36 38.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 015 Precision Code: 1  
Mile: 3.100 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: CEDAR BLUFF  
ON WEISS RESERVOIR AT CEDAR BLUFF; ALABAMA POWER RESERVOIR MILE 10-  
11.0

Episode Number: 92 12 Date Collected: 11/07/91 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: FLOYD 2: PAUL 3: CATCHINGS

Station Code: WEI2 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 12 54.1 N Longitude: 085 36 38.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 015 Precision Code: 1  
Mile: 3.100 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: CEDAR BLUFF  
ON WEISS RESERVOIR AT CEDAR BLUFF; ALABAMA POWER RESERVOIR MILE 10-  
11.0

Episode Number: 93 05 Date Collected: 11/06/92 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: CATCHINGS 2: FLOYD 3:

Station Code: WEI2 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 12 54.1 N Longitude: 085 36 38.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 015 Precision Code: 1  
Mile: 3.100 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: CEDAR BLUFF  
ON WEISS RESERVOIR AT CEDAR BLUFF; ALABAMA POWER RESERVOIR MILE 10-  
11.0

Episode Number: 94 23 Date Collected: 11/03/93 Method: GN  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: DAVIES 3: HOUSTON

Station Code: WEI3 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 12 0.3 N Longitude: 085 36 38.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 019 Precision Code: 1  
Mile: 3.200 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: STATE LINE  
ON WEISS RESERVOIR AT THE ALABAMA/GEORGIA STATE LINE; ALABAMA POWER  
RESERVOIR MILE 29.0

Episode Number: 92 13 Date Collected: 11/14/91 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: FLOYD 2: PAUL 3:

Station Code: WEI3 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 12 0.3 N Longitude: 085 36 38.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 019 Precision Code: 1  
Mile: 3.200 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: STATE LINE  
ON WEISS RESERVOIR AT THE ALABAMA/GEORGIA STATE LINE; ALABAMA POWER  
RESERVOIR MILE 29.0

Episode Number: 93 06 Date Collected: 12/18/92 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: FLOYD 2: CATCHINGS 3:

Station Code: WEI3 Water Body: WEISS RESERVOIR RESERVOIR  
Latitude: 34 12 0.3 N Longitude: 085 36 38.8 W  
BASIN: Major: SOUTHEAST Minor: COOSA RIVER  
HUC Code: 03150105 Reach Code: 019 Precision Code: 1  
Mile: 3.200 COUNTY: 1: CHEROKEE 2:  
LOCATION: Near City: STATE LINE  
ON WEISS RESERVOIR AT THE ALABAMA/GEORGIA STATE LINE; ALABAMA POWER  
RESERVOIR MILE 29.0

Episode Number: 94 24 Date Collected: 11/04/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: HOUSTON 3:

Station Code: WES2 Water Body: WESTPOINT RESERVOIR RESERVOIR  
Latitude: 32 59 20.9 N Longitude: 085 11 28.3 W  
BASIN: Major: SOUTHEAST Minor: CHATTAHOOCHEE RIVER  
HUC Code: 03130002 Reach Code: 024 Precision Code: 1  
Mile: 0.001 COUNTY: 1: TROUP, GA 2:  
LOCATION: Near City: WESTPOINT  
ON WESTPOINT LAKE AT CONFLUENCE OF WEHADKEE, STOUD AND VEASEY CREEKS,  
CHATTAHOOCHEE RIVER MILE 205.2.

Episode Number: 94 01 Date Collected: 09/23/93 Method: EF  
Collecting Agency: 001 ADEM-MONTGOMERY  
Collector 1: LESLIE 2: HOUSTON 3:

Station Code: WHE1 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 48 42.7 N Longitude: 087 20 47.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 016 Precision Code: 1  
Mile: 1.600 COUNTY: 1: LAUDERDALE 2: LAWRENCE  
LOCATION: Near City: ROGERSVILLE  
ON UPSTREAM OF THE DAM AT TRM 277.0, NEAR THE CONFLUENCE OF FIRST  
CREEK WITH THE MAIN CHANNEL

Episode Number: 92 25 Date Collected: 01/28/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: MITCHELL 2: JAMES 3:

Station Code: WHE1 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 48 42.7 N Longitude: 087 20 47.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 016 Precision Code: 1  
Mile: 1.600 COUNTY: 1: LAUDERDALE 2: LAWRENCE  
LOCATION: Near City: ROGERSVILLE  
ON UPSTREAM OF THE DAM AT TRM 277.0, NEAR THE CONFLUENCE OF FIRST CREEK WITH THE MAIN CHANNEL

Episode Number: 92 58 Date Collected: 10/08/91 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WHE1 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 48 42.7 N Longitude: 087 20 47.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 016 Precision Code: 1  
Mile: 1.600 COUNTY: 1: LAUDERDALE 2: LAWRENCE  
LOCATION: Near City: ROGERSVILLE  
ON UPSTREAM OF THE DAM AT TRM 277.0, NEAR THE CONFLUENCE OF FIRST CREEK WITH THE MAIN CHANNEL

Episode Number: 92 68 Date Collected: 09/22/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WHE3 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 39 3.8 N Longitude: 087 02 40.4 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 023 Precision Code: 1  
Mile: 0.400 COUNTY: 1: LIMESTONE 2: MORGAN  
LOCATION: Near City: DECATUR  
ON DOWNSTREAM OF BAKERS CREEK AT TRM 300.0 TO 296.0

Episode Number: 92 26 Date Collected: 01/30/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: MITCHELL 2: TAYLOR 3:

Station Code: WHE3 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 39 3.8 N Longitude: 087 02 40.4 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 023 Precision Code: 1  
Mile: 0.400 COUNTY: 1: LIMESTONE 2: MORGAN  
LOCATION: Near City: DECATUR  
ON DOWNSTREAM OF BAKERS CREEK AT TRM 300.0 TO 296.0

Episode Number: 92 59 Date Collected: 10/10/91 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WHE3 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 39 3.8 N Longitude: 087 02 40.4 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 023 Precision Code: 1  
Mile: 0.400 COUNTY: 1: LIMESTONE 2: MORGAN  
LOCATION: Near City: DECATUR  
ON DOWNSTREAM OF BAKERS CREEK AT TRM 300.0 TO 296.0

Episode Number: 93 60 Date Collected: 12/30/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WHE3 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 39 3.8 N Longitude: 087 02 40.4 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 023 Precision Code: 1  
Mile: 0.400 COUNTY: 1: LIMESTONE 2: MORGAN  
LOCATION: Near City: DECATUR  
ON DOWNSTREAM OF BAKERS CREEK AT TRM 300.0 TO 296.0

Episode Number: 93 62 Date Collected: 01/05/93 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WHE4 Water Body: WHEELER RESERVOIR RESERVOIR  
Latitude: 34 34 13.4 N Longitude: 086 40 29.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030002 Reach Code: 049 Precision Code: 1  
Mile: 4.000 COUNTY: 1: MADISON 2: MORGAN  
LOCATION: Near City: TRIANA  
ON FOUR MILES UPSTREAM OF CONFLUENCE OF INDIAN CREEK AT TRM 325.0

Episode Number: 92 24 Date Collected: 10/31/91 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: MITCHELL 2: JAMES 3:

Station Code: WILL Water Body: WILSON RESERVOIR RESERVOIR  
Latitude: 34 48 16.1 N Longitude: 087 37 27.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 4.500 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON DAM FOREBAY AT TRM 259.5

Episode Number: 92 28 Date Collected: 01/27/92 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: MITCHELL 2: JAMES 3:

Station Code: WIL1 Water Body: WILSON RESERVOIR RESERVOIR  
Latitude: 34 48 16.1 N Longitude: 087 37 27.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 4.500 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON DAM FOREBAY AT TRM 259.5

Episode Number: 92 65 Date Collected: 12/11/91 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WIL1 Water Body: WILSON RESERVOIR RESERVOIR  
Latitude: 34 48 16.1 N Longitude: 087 37 27.2 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 4.500 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON DAM FOREBAY AT TRM 259.5

Episode Number: 93 51 Date Collected: 10/07/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WIL2 Water Body: WILSON RESERVOIR RESERVOIR  
Latitude: 34 48 30.9 N Longitude: 087 25 54.7 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 17.000 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON 1 MILE DOWNSTREAM OF BLUE WATER CREEK FROM TRM 272.0 TO 274.0

Episode Number: 92 27 Date Collected: 12/11/91 Method: EF  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: ARMSTRONG 2: WARDEN 3:

Station Code: WIL2 Water Body: WILSON RESERVOIR RESERVOIR  
Latitude: 34 48 30.9 N Longitude: 087 25 54.7 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 17.000 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON 1 MILE DOWNSTREAM OF BLUE WATER CREEK FROM TRM 272.0 TO 274.0

Episode Number: 92 60 Date Collected: 10/03/91 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: WIL2 Water Body: WILSON RESERVOIR RESERVOIR  
Latitude: 34 48 30.9 N Longitude: 087 25 54.7 W  
BASIN: Major: TENNESSEE Minor: TENNESSEE RIVER  
HUC Code: 06030005 Reach Code: 044 Precision Code: 1  
Mile: 17.000 COUNTY: 1: LAUDERDALE 2: COLBERT  
LOCATION: Near City: FLORENCE  
ON 1 MILE DOWNSTREAM OF BLUE WATER CREEK FROM TRM 272.0 TO 274.0

Episode Number: 93 52 Date Collected: 10/08/92 Method: GN  
Collecting Agency: 002 TENNESSEE VALLEY AUTHORITY  
Collector 1: TVA 2: 3:

Station Code: YAT1 Water Body: YATES RESERVOIR RESERVOIR  
Latitude: 32 34 39.8 N Longitude: 085 53 24.3 W  
BASIN: Major: SOUTHEAST Minor: TALLAPOOSA RIVER  
HUC Code: 03150110 Reach Code: 030 Precision Code: 1  
Mile: 3.500 COUNTY: 1: ELMORE 2: TALLAPOOSA  
LOCATION: Near City: TALLASSEE  
ON DAM FOREBAY RESERVOIR MILE 0-1.0 (IN THE VICINITY AND BELOW  
SOUGAHATCHEE CREEK EMBAYMENT)

Episode Number: 93 10 Date Collected: 10/15/92 Method: EF  
Collecting Agency: 003 AL DEPT OF CONSERVATION  
Collector 1: MCHUGH 2: HIGGINBOTHAM 3: