

ADEM Fish Tissue Monitoring Program 2023 Annual Report

Tennessee River Basin with additional Coastal sites

May 13, 2024

Alabama Department of Environmental Management

Field Operations Division

Montgomery Branch

TABLE OF CONTENTS

LIST OF FIGURES 3

LIST OF TABLES 4

INTRODUCTION..... 5

METHODS 10

RESULTS 13

LIST OF FIGURES

Figure 1. CY2023 FTMP sample locations..... 14

LIST OF TABLES

Table 1. Analytical parameters for the ADEM Fish Tissue Monitoring Program. 11

Table 2. CY2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description. 15

Table 3. CY2023 Fish Tissue Monitoring Program analytical results..... 21

INTRODUCTION

The Alabama Department of Environmental Management (ADEM) and its predecessor, the Alabama Water Improvement Commission (AWIC), have collected fish for analysis of contaminant levels since 1970. For the 20 years that followed, fish collections focused on areas of known or suspected contamination. In 1991, the ADEM expanded its Fish Tissue Monitoring Program (FTMP) to provide a statewide screening of bioaccumulative contaminants in fish tissue. The expanded program was designed to provide the Alabama Department of Public Health (ADPH) with the data needed for determination of potential risk to those who consume fish from Alabama waters and to issue/modify fish consumption advisories within the state. The expanded program historically exists as a cooperative effort between the ADEM, the ADPH, the Alabama Department of Conservation and Natural Resources (ADCNR) and the Tennessee Valley Authority (TVA).

Following expansion of the program to statewide screening, fish from all of Alabama's major reservoirs, rivers, streams, and state-managed public fishing lakes were collected over a five-year period. Data from these locations were provided to the ADPH for issuance, modification, or removal of fish consumption advisories to the public. The results of the program over the five-year period indicated that the majority of Alabama waterbodies supported healthy fish populations with low to undetectable contaminant levels where any contaminants existed. However, the ADPH determined that fish from certain waterbodies were found to contain contaminant levels in excess of Environmental Protection Agency (EPA) and Food and Drug Administration (FDA) guidance levels.

In 1997, the FTMP was incorporated into the ADEM Watershed Management Approach. Pursuant to this approach, water quality of each major drainage basin in the state was assessed by

ADEM on a five-year rotating basis. The initial rotation was completed in 2001 with the five major basins and years sampled as follows:

- a) Black Warrior and Cahaba Rivers (1997)
- b) Tennessee River (1998)
- c) Chattahoochee and Conecuh Rivers (1999)
- d) Coosa, Tallapoosa and Alabama Rivers (2000)
- e) Escatawpa, Mobile and Tombigbee Rivers (2001)

In addition to the basin locations sampled each year, the ADEM continued to sample areas of concern outside the focus basin as needed or requested by cooperating agencies and as resources allowed.

Because of the variability in contaminant concentrations observed in fish collected from locations over several years, and the need for additional monitoring at a number of locations, the approach to annual monitoring was refined in 2002. Annual fish tissue monitoring by ADEM became multi-faceted and directed toward accomplishing three objectives:

- a) Sampling locations throughout the focus basin,
- b) Repetitive sampling of sites where the ADPH had determined that EPA/FDA limits had been exceeded and
- c) Sampling remaining areas in Alabama where fish had not been collected for the FTMP.

Repetitive sampling of sites where EPA/FDA action levels had been exceeded proceeded as follows:

- a) Sites that exceeded EPA/FDA limits for the first time the previous year were sampled for a minimum of two concurrent years to provide verification of contaminant concentrations as requested by the ADPH.
- b) Sites where ADPH consumption advisories currently existed were sampled at a minimum of every three years to provide data for analysis of trends in contaminant concentrations.

In June 2006 the ADPH adopted the EPA guidance level of 0.33 ug/g mercury in fish for issuance of public consumption advisories, replacing the FDA guidance level of 1.0 ug/g previously used. In March 2014, the FTMP discontinued dioxin monitoring below paper mills. Dioxin monitoring was discontinued because levels in fish had been below method detection levels since 2004 and below levels requiring consumption advisories since the early 1990's.

The program was further modified in 2015 to meet the data needs of the ADEM water quality assessment and listing process. In order to meet these needs, fish tissue samples were collected within each major river basin in the state on a three-year rotating basis, providing two repetitions of sampling within the six-year period required for monitoring data in the assessment and listing methodology. The initial regional rotation was as follows:

- a) Alabama, Cahaba, Tallapoosa and Tennessee Rivers (2015),
- b) Coosa, Mobile and Tombigbee Rivers (2016),
- c) Black Warrior, Perdido-Escambia, Choctawhatchee, Pea and Chattahoochee Rivers (2017).

In addition to the major river basin schedule, coastal sample locations (locations south of the I-65 Mobile River Bridge) were divided into three geographic regions, eastern, central and western, and sampled on a three-year rotation as well.

Within the river basins and coastal zones, site selection was directed toward accomplishing three goals:

- a) Repetitive sampling of sites where the ADPH had determined that EPA/FDA limits had been exceeded,
- b) Repetitive sampling of sites within each major Alabama reservoir in support of Alabama's Assessment and Listing Methodology,
- c) Sampling remaining areas in Alabama where fish had not been collected for the FTMP or other areas of concern as they arose.

Since the adoption of the lower EPA guidance level for mercury in 2006 the number of sample locations with consumption advisories for mercury has steadily increased. The combination of this increase in advisory locations with the three year basin rotation instituted in 2015 has caused an increase in the number of yearly sample locations to a point that has become unsustainable due to laboratory limitations as well as funding constraints. In order to maximize available laboratory resources, as well as streamline data reporting, the program was further modified in 2017.

In 2017 the Fish Tissue Monitoring Program began operating on a five-year basin rotation with the following four goals,

- a) Sampling locations throughout the focus basin,

- b) Repetitive sampling of sites within the focus basin where the ADPH has determined that EPA/FDA action limits have been exceeded,
- c) Repetitive sampling of sites within the focus basin in support of Alabama's Assessment and Listing Methodology,
- d) Sampling remaining areas in Alabama where fish have not been collected for the FTMP or other areas of concern as they arise.

The 2020 through 2022 basin rotation schedules were modified due to the need to minimize close contact of staff during the coronavirus response. The Tombigbee and Mobile Basins were sampled in 2020 while the Black Warrior and Cahaba basins were sampled in 2021. Since mercury is the main compound of concern within those basins, all 2020 and 2021 samples were collected using the non-lethal field biopsy plug method and analyzed for individual mercury only. No in lab fish processing occurred during 2020 or 2021. The Alabama, Coosa, and Tallapoosa basins include PCB advisories which require lab processing for entire fish filets. Those basins were sampled during 2022. The future basin rotation is as follows,

- Perdido-Escambia, Choctawhatchee, Pea, and Chattahoochee Rivers (2024)
- Mobile and Tombigbee Rivers (2025)
- Black Warrior and Cahaba Rivers (2026)
- Alabama, Coosa, and Tallapoosa Rivers (2027)
- Tennessee River (2028)

In addition to the major river basin schedule, coastal sample locations (locations south of the I-65 Mobile River bridge) are divided roughly into five geographic regions and sampled on a five-year rotation as well. The extent to which the above goals are accomplished each year is dependent upon available resources.

METHODS

Fish sampling and tissue preparation procedures for the FTMP are as described in the ADEM documents: *Fish Tissue Monitoring Program Sample Collection Procedures (SOP #2300)*, *Fish Tissue Monitoring Program Sample Processing and Data Reporting Procedures (SOP# 2301)* and *Fish Tissue Monitoring Program Non-Lethal Biopsy Plug Sample Collection and Processing Procedures (SOP#2302)*.

Sampling is typically conducted in the fall of the year, generally October-December for the FTMP. These months are preferred in fish tissue monitoring programs because:

- a) Organic pollutants, primarily stored in fatty (lipid) tissue, would be at the greatest concentration as fat content of fish is highest at this time of year.
- b) Target species are more easily collected while water levels are low and as water temperatures cool.
- c) Fall collections do not interfere with spawning seasons of target species.

Collection methods may include electrofishing and/or gillnets as needed. Typically six individuals of the same species are collected at each location from each of two primary feeding groups, predators and bottom-feeders. At stations where FDA and/or EPA guidance levels have been exceeded, multiple commercial and/or sport fish species may be collected if available and as resources allow. Collected fish are within a size range identified in the SOP, with the additional requirement that catfish weigh a minimum of one pound as requested by the ADPH.

After collection, fish are weighed and measured with any abnormalities noted. Tissue samples are collected as described in the ADEM documents *SOP#2301* and *SOP#2302* and

packaged for laboratory analysis (Table 1) and/or storage as needed. Otoliths and/or spines are removed from the carcass if available and preserved for age determinations.

Table 1. Analytical parameters for the ADEM Fish Tissue Monitoring Program.

Parameter	Method	RL	MDL	FDA Guidance Level	EPA Guidance Level
Arsenic, Total	EPA200.8	5.0 ug/g	0.059 ug/g		
Cadmium	EPA200.8	5.0 ug/g	0.081 ug/g		
Mercury, Total	EPA7473	0.1 ug/g	0.056 ug/g		0.33 ug/g
Selenium, Total	EPA200.8	5.0 ug/g	0.165 ug/g		
Chlordane, Total	SW8081A	0.125 ug/g		0.3 ug/g	
4,4-DDD	SW8081A	0.002 ug/g		Total DDT 5.0 ug/g	
4,4-DDE	SW8081A	0.002 ug/g			
4,4-DDT	SW8081A	0.002 ug/g			
2,4-DDD	SW8081A	0.002 ug/g			
2,4-DDE	SW8081A	0.002 ug/g			
2,4-DDT	SW8081A	0.002 ug/g			
Chlorpyrifos	SW8081A	0.002 ug/g			
Dieldrin	SW8081A	0.002 ug/g		0.3 ug/g	
Endosulfan I	SW8081A	0.002 ug/g			
Endosulfan II	SW8081A	0.002 ug/g			
Endrin	SW8081A	0.002 ug/g			
gamma-BHC (Lindane)	SW8081A	0.002 ug/g			
Heptachlor	SW8081A	0.002 ug/g		0.3 ug/g	
Heptachlor Epoxide	SW8081A	0.002 ug/g		0.3 ug/g	
Hexachlorobenzene	SW8081A	0.002 ug/g			
Mirex	SW8081A	0.002 ug/g		0.1 ug/g	
Arochlor 1016	SW8082	0.125 ug/g			
Arochlor 1221	SW8082	0.125 ug/g			
Arochlor 1232	SW8082	0.125 ug/g			
Arochlor 1242	SW8082	0.125 ug/g			
Arochlor 1248	SW8082	0.125 ug/g			
Arochlor 1254	SW8082	0.125 ug/g			
Arochlor 1260	SW8082	0.125 ug/g			
Total PCBs	SW8082	0.125 ug/g		2.0 ug/g	
Toxaphene	SW8081A	0.125 ug/g		5.0 ug/g	
Percent lipids	SW3640A	0.10%			

To maximize available lab resources, routine organic analyses (PCBs and pesticides) were reduced where no previous exceedances have occurred. Sample locations are divided into two tiers for ordering laboratory analysis. Tier I (screening) sites are locations where no data exists or chemical

contaminants in fish have not been found to exceed levels of concern for human health. Tier II (targeted) locations are sites where screening samples have identified concentrations of chemicals that do exceed levels of concern for human health.

Beginning in 2018 analysis requested for routine Tier I sample locations are divided into two groups.

- Tier I Group I sites will be locations with one or fewer FTMP station visits and will be analyzed as “Individual Mercury” and “Composite All Other Parameters”.
- Tier I Group II sites will be locations with two or more FTMP station visits within a 15 year period where chemical contaminants in fish have not been found to exceed levels of concern. Those sites will receive “Individual Mercury” analysis.

Likewise, Tier II sample locations are divided into two groups.

- Tier II Group I sites will be locations with one FTMP station visit within 15 years where EPA/FDA action levels were exceeded for some contaminant. Those sites will be analyzed “Individually” for the contaminant of concern as well as “Individual Mercury” and “Composite All Other Parameters”.
- Tier II Group II sites will be locations with two or more FTMP station visits within a 15 year period where EPA/FDA action levels were exceeded for some contaminant. Those sites will be analyzed “Individually” for the contaminant of concern and will be analyzed for “Individual Mercury” as well.

Based on historic data or current concerns additional lab analysis may be ordered.

Following completion of analyses, all data are compiled and distributed to cooperating agencies. Analytical results are published and provided to the public through the ADEM website.

RESULTS

From September through December 2023, samples from 455 fish (6 different species) from 39 locations (Figure 1 and Table 2) were collected and analyzed for the FTMP. Thirty-five different waterbodies were sampled. Nineteen locations with a current consumption advisory for mercury were sampled. To date, samples comprised of several thousand fish have been collected from 388 sites for the FTMP. Analytical results for the 2023 FTMP are presented in Table 3. Information on current fish consumption advisories that were developed from FTMP data is available on the ADPH website at <http://www.adph.org/tox/index.asp?id=1360>. Nutritional information and safe practices for selecting and preparing fish are also available at this site.

ADEM's monitoring program also includes an evaluation of the physical condition of important sport and/or commercial fish species. Results of the evaluation indicate the majority of the fish evaluated were in good to excellent condition. Fish were also checked for anomalies, such as lesions, tumors, parasites and deformities. Some 89 percent of the fish observed had no anomalies. The most commonly observed anomalies were external and internal parasites. The occurrence of lesions on fish during spring and fall may be the result of bacterial infections associated with changing water temperatures, spawning stress or a combination of natural occurrences. These infections are not dangerous to the consumer, and the fish are edible if properly prepared.

For more information regarding ADEM's Fish Tissue Monitoring Program please contact Michael Len at 334-260-2787.

Figure 1. CY2023 FTMP sample locations.

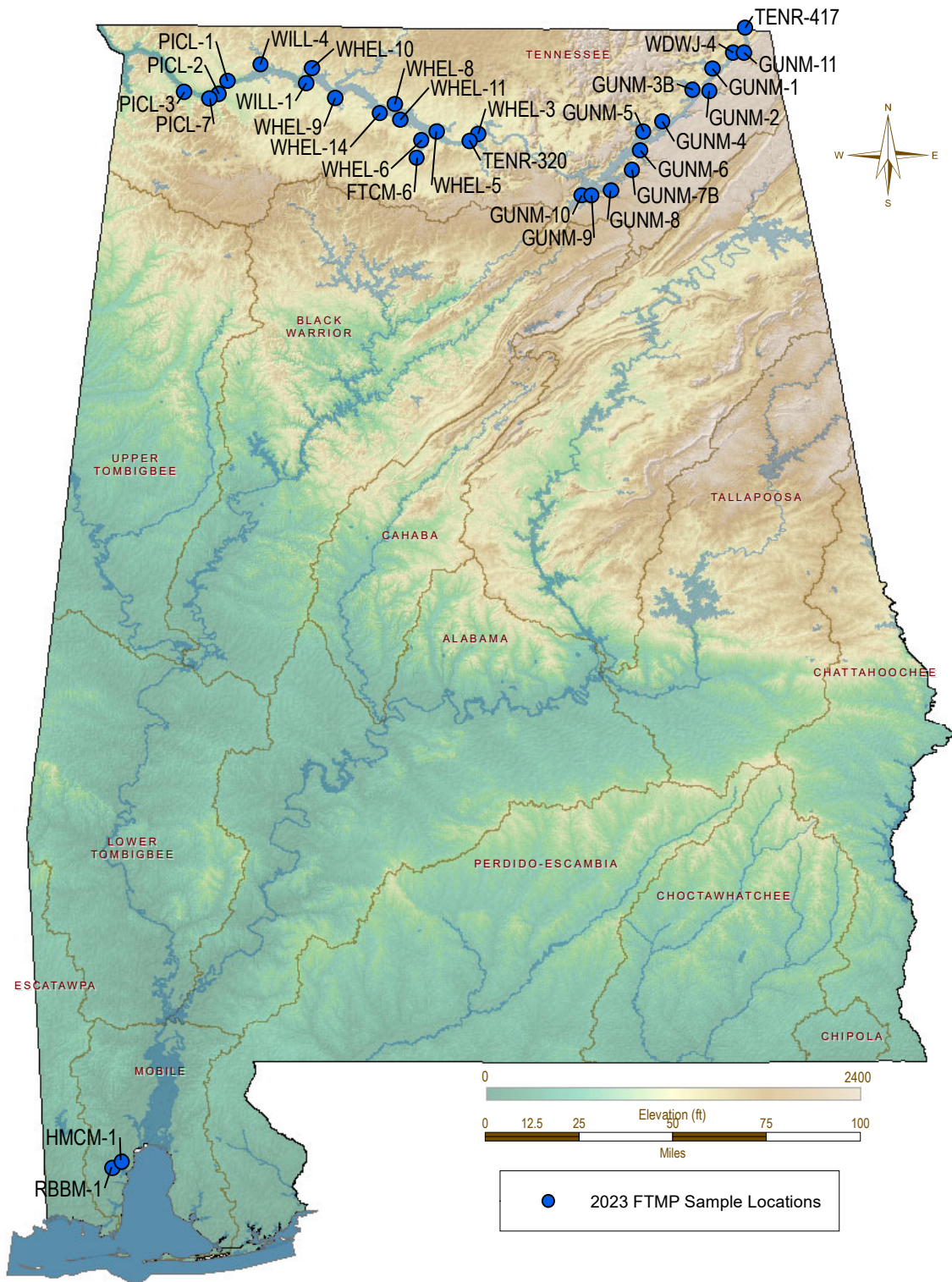


Table 2. CY 2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Mobile	Halls Mill Ck	HMCM-1	Mobile	Largemouth bass Striped mullet Channel catfish	Halls Mill Creek upstream of the confluence with the Dog River.
Mobile	Rabbit Ck	RBBM-1	Mobile	Largemouth bass Striped mullet	Rabbit Creek upstream of the confluence with Dog River.
Tennessee	Bakers Ck (Wheeler)	WHEL-11	Morgan	Channel catfish Largemouth bass	Bakers Creek upstream of Bakers Creek/Tennessee River confluence.
Tennessee	Bear Ck Res	BCRF-1	Franklin	Channel catfish Largemouth bass	Dam forebay area of Bear Creek Reservoir. Bear Creek mile 75.
Tennessee	Big Nance Ck (Wilson)	WILL-1	Lawrence	Channel catfish Largemouth bass	Deepest point, main creek channel, Big Nance Creek embayment, immediately upstream of AL Hwy 101 bridge.
Tennessee	Big Spr Ck (Guntersville)	GUNM-9	Marshall	Channel catfish Largemouth bass	Deepest point, main creek channel, Big Spring Creek embayment, immediately upstream of AL Hwy 227 bridge.
Tennessee	Browns Ck (Guntersville)	GUNM-10	Marshall	Channel catfish Largemouth bass	Deepest point, main creek channel, Brown's Creek embayment, approximately 1 mile upstream of Hwy. 69 bridge.

Table 2. CY 2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Cane Ck (Pickwick)	PICL-3	Colbert	Channel catfish Largemouth bass	Cane Creek embayment approximately 1 mile upstream of confluence with Tennessee River.
Tennessee	Cedar Ck Res	CEDF-2	Franklin	Channel catfish Largemouth bass	Dam forebay to 1.0 mile upstream of the dam.
Tennessee	Coon Ck (Guntersville)	GUNM-2	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, Coon Creek embayment, approximately 2 miles upstream of lake confluence.
Tennessee	Crow Ck (Guntersville)	GUNM-1	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, Crow Creek embayment, approximately 0.5 mile downstream of US Hwy 72 bridge.
Tennessee	Cypress Ck (Pickwick)	PICL-1	Lauderdale	Channel catfish Largemouth bass	Deepest point, main creek channel, Cypress Creek embayment, approximately 0.5 mile upstream of AL Hwy 20.
Tennessee	Elk R (Wheeler)	ELKL-1	Lauderdale	Largemouth bass Channel catfish	Elk River embayment approximately river mile 6.
Tennessee	Flint Ck	FTCM-6	Morgan	Channel catfish Largemouth bass	Flint Creek downstream of Flint Creek/West Flint Creek confluence. Vicinity of US Hwy 31.

Table 2. CY 2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Flint Ck (Wheeler)	WHEL-6	Morgan	Channel catfish Largemouth bass	Deepest point, main creek channel, Flint Creek embayment, 1 mile downstream of AL Hwy 67 bridge at public access area.
Tennessee	Fox Ck (Wheeler)	WHEL-14	Lawrence	Channel catfish Largemouth bass	Fox Ck embayment of Wheeler Reservoir.
Tennessee	Indian Ck (Wheeler)	WHEL-3	Madison	Channel catfish Largemouth bass	Deepest point, main creek channel, Indian Creek embayment, 1 mile upstream of lake confluence.
Tennessee	Limestone Ck (Wheeler)	WHEL-5	Limestone	Channel catfish Largemouth bass	Limestone Creek embayment beginning approximately 1 mile upstream of confluence with Tennessee River.
Tennessee	Little Bear Ck	PICL-7	Colbert	Channel catfish Largemouth bass	Little Bear Creek embayment approximately 0.7 miles from mouth.
Tennessee	Little Bear Ck Res	LBRF-2	Franklin	Channel catfish Largemouth bass	Dam forebay area, Little Bear Creek mile 12.5.
Tennessee	Long Island Ck (Guntersville)	GUNM-11	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, approximately 0.5 mile upstream from the main reservoir.

Table 2. CY 2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Mud Ck (Guntersville)	GUNM-3B	Jackson	Channel catfish Largemouth bass	Mud Creek embayment upstream of Jackson Co Rd 213.
Tennessee	N Sauty Ck (Guntersville)	GUNM-5	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, North Sauty Creek embayment, immediately upstream of AL Hwy 79 bridge.
Tennessee	Roseberry Ck (Guntersville)	GUNM-4	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, Roseberry/Dry Creek embayment, approximately 0.5 mile downstream of Jackson County Park.
Tennessee	Round Island Ck (Wheeler)	WHEL-8	Limestone	Channel catfish Largemouth bass Blue catfish	Deepest point, main creek channel, Round Island Creek embayment, approximately 1.5 miles upstream of lake confluence.
Tennessee	S Sauty Ck (Guntersville)	GUNM-6	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, South Sauty Creek embayment, immediately upstream of Co Rd 67 bridge.
Tennessee	Second Ck (Wheeler)	WHEL-10	Lauderdale	Channel catfish Largemouth bass	Deepest point, main creek channel, Second Creek embayment, approximately 0.5 mile downstream of Hwy 72 bridge.
Tennessee	Shoal Ck (Wilson)	WILL-4	Lauderdale	Channel catfish Largemouth bass	Deepest point, main creek channel, Shoal Creek embayment, immediately upstream of US Hwy 72 bridge.

Table 2. CY 2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Short Ck (Guntersville)	GUNM-8	Marshall	Channel catfish Largemouth bass	Deepest point, main creek channel, Short Creek embayment, immediately upstream of AL Hwy 227 bridge.
Tennessee	Spring Ck (Pickwick)	PICL-2	Colbert	Channel catfish Largemouth bass	Spring Creek embayment approximately 1 mile upstream of Pickwick Reservoir confluence.
Tennessee	Spring Ck (Wheeler)	WHEL-9	Lawrence	Channel catfish Largemouth bass	Deepest point, main creek channel, Spring Creek embayment, approximately 0.5 mile upstream of Co Rd 400 bridge.
Tennessee	Tennessee R	TENR-417	Jackson	Channel catfish Largemouth bass	At AL/TN stateline just upstream of Long Island at RM 417.
Tennessee	Town Ck (Guntersville)	GUNM-7B	Marshall	Channel catfish Largemouth bass	Town Creek embayment approximately 4 miles upstream of AL Hwy 227.
Tennessee	U Bear Ck Res	UBAM-1	Marion	Channel catfish Largemouth bass	Upper Bear Creek Reservoir dam forebay area. Upper Bear Creek mile 115.
Tennessee	Wheeler Res	TENR-277	Lauderdale	Largemouth bass Channel catfish	Upstream of the dam at Tennessee River mile 277.0, near the confluence of First Creek with the main channel.

Table 2. CY 2023 FTMP sample location information; basin, locale, station ID, county, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Wheeler Res	TENR-296	Limestone	Channel catfish Largemouth bass	Mid station, main river channel, Tennessee River mile 296.
Tennessee	Wheeler Res	TENR-320	Madison	Channel catfish Largemouth bass Spotted bass	Vicinity of Tennessee River mile 320. 0.9 miles upstream of Cotaco Creek and 1.0 mile downstream of Indian Creek.
Tennessee	Wheeler Res	TENR-347	Marshall	Largemouth bass Channel catfish	Wheeler Reservoir, Tennessee River mile 347, 2.0 miles downstream of Guntersville dam.
Tennessee	Widows Ck	WDWJ-4	Jackson	Spotted sucker Largemouth bass	Stretch of Widows Creek from 1.5 miles upstream of Tennessee River confluence to first bridge crossing (Million Dollar Bridge).



Table 3. CY2023 Fish Tissue Monitoring Program Analytical Results

WHEL-11 Bakers Ck (Wheeler) - Bakers Creek upstream of Bakers Creek/Tennessee River confluence.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	505	580	523	630	472	670
Length (inches)	19.88	22.83	20.59	24.80	18.58	26.38
Weight (g)	860	1,280	940	2,930	970	3,660
Weight (oz)	30.34	45.15	33.16	103.35	34.22	129.10
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.054 JI	.094 JI	.211	< .051	< .051	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	399	420	399	420	403	370
Length (inches)	15.71	16.54	15.71	16.54	15.87	14.57
Weight (g)	1,010	970	890	1,250	760	680
Weight (oz)	35.63	34.22	31.39	44.09	26.81	23.99
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.168	< .051	.12	.333	< .051

Franklin County

BCRF-1 Bear Ck Res - Dam forebay area of Bear Creek Reservoir. Bear Creek mile 75.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	532	463	457	480	552	523
Length (inches)	20.94	18.23	17.99	18.90	21.73	20.59
Weight (g)	1,194	898	800	936	1,492	1,032
Weight (oz)	42.12	31.68	28.22	33.02	52.63	36.40
Sex/Age	/5	/5	/4	/4	/5	/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.123	.294	.399	.227	.169	.237

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	392	408	456	463	440	359
Length (inches)	15.43	16.06	17.95	18.23	17.32	14.13
Weight (g)	940	860	1,302	1,350	1,330	600
Weight (oz)	33.16	30.34	45.93	47.62	46.91	21.16
Sex/Age	/3	/3	/3	/6	/4	/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.628	.718	.864	.704	.8	.465

WILL-1 Big Nance Ck (Wilson) - Deepest point, main creek channel, Big Nance Creek embayment, immediately upstream of AL Hwy 101 bridge.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	462	473	499	425	458	460
Length (inches)	18.19	18.62	19.65	16.73	18.03	18.11
Weight (g)	860	880	1,420	520	880	870
Weight (oz)	30.34	31.04	50.09	18.34	31.04	30.69
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-09-23	11-09-23	11-09-23	11-09-23	11-09-23	11-09-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.245	.199	.214	.168	< .051	.148

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	460	429	340	349	342	442
Length (inches)	18.11	16.89	13.39	13.74	13.46	17.40
Weight (g)	1,430	1,250	790	570	470	1,250
Weight (oz)	50.44	44.09	27.87	20.11	16.58	44.09
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-09-23	11-09-23	11-09-23	11-09-23	11-09-23	11-09-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.085 JI	.393	.133	.154	< .051	.351

Marshall County**GUNM-9 Big Spr Ck (Guntersville) - Deepest point, main creek channel, Big Spring Creek embayment, immediately upstream of AL Hwy 227 bridge.****Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	433	550	429	432	650	678
Length (inches)	17.05	21.65	16.89	17.01	25.59	26.69
Weight (g)	700	1,260	670	640	2,250	2,510
Weight (oz)	24.69	44.45	23.63	22.58	79.37	88.54
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.054 JI	< .051	< .051	< .051	< .051	.176

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	394	415	349	397	436	339
Length (inches)	15.51	16.34	13.74	15.63	17.17	13.35
Weight (g)	750	1,120	490	1,040	1,090	460
Weight (oz)	26.46	39.51	17.28	36.68	38.45	16.23
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.234	< .051	.146	.212	< .051

GUNM-10 Browns Ck (Guntersville) - Deepest point, main creek channel, Brown's Creek embayment, approximately 1 mile upstream of Hwy. 69 bridge.

Channel Catfish (*Ictalurus punctatus*)

	Fish 1	Fish 2	Fish 3	Fish 4
Length (mm)	445	447	505	547
Length (inches)	17.52	17.60	19.88	21.54
Weight (g)	852	716	1,050	1,306
Weight (oz)	30.05	25.26	37.04	46.07
Sex/Age	M/6	M/6	M/7	F/7
Age Method	Spine	Spine	Spine	Spine
Collection Date	10-19-23	10-19-23	10-19-23	10-19-23
Skin on Fillet	N	N	N	N

Internal Parasite	Slight/Mild		Slight/Mild Severe/Heavy	
-------------------	-------------	--	--------------------------	--

MERCURY, TOTAL ug/g	< .051	.132	< .051	< .051
---------------------	--------	------	--------	--------

Composite - 4 Fish**Bottle Code: 10/19/2023 GUNM-10 CHC 01-04**

2,4'-DDD ug/g	< .0015 JQ3
2,4'-DDE ug/g	< .0017 JQ3
2,4'-DDT ug/g	< .0016 JQ3
4,4'-DDD ug/g	< .0019 JQ3
4,4'-DDE ug/g	.0036 JQ3
4,4'-DDT ug/g	< .00095 JQ3
AROCHLOR 1016 ug/g	< .117 JQ3
AROCHLOR 1221 ug/g	< .125 JQ3
AROCHLOR 1232 ug/g	< .125 JQ3
AROCHLOR 1242 ug/g	< .125 JQ3
AROCHLOR 1248 ug/g	< .125 JQ3
AROCHLOR 1254 ug/g	< .037 JQ3
AROCHLOR 1260 ug/g	< .1 JQ3
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072 JQ3
CHLORPYRIFOS ug/g	< .0019 JQ3
DIELDRIN ug/g	< .00098 JQ3
ENDOSULFAN I ug/g	< .00094 JQ3
ENDOSULFAN II ug/g	< .0019 JQ3
ENDRIN ug/g	< .00082 JQ3
HEPTACHLOR ug/g	< .0011 JQ3
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ3
HEXACHLOROBENZENE ug/g	< .0015 JQ3
LINDANE ug/g	< .00097 JQ3
LIPIDS %	.045
MIREX ug/g	< .0016 JQ3
PCBS, TOTAL ug/g	< .117 JQ3
SELENIUM, TOTAL ug/g	< .155
TOXAPHENE ug/g	< .069 JQ3

GUNM-10 Browns Ck (Guntersville) - Deepest point, main creek channel, Brown's Creek embayment, approximately 1 mile upstream of Hwy. 69 bridge.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	358	419	375	423	332	382
Length (inches)	14.09	16.50	14.76	16.65	13.07	15.04
Weight (g)	584	1,018	832	1,224	606	778
Weight (oz)	20.60	35.91	29.35	43.18	21.38	27.44
Sex/Age	M/2	M/4	M/3	F/2	M/2	M/7
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-19-23	10-19-23	10-19-23	10-19-23	10-19-23	10-19-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Slight/Mild

MERCURY, TOTAL ug/g	< .051	.053	.072	< .051	.054	.242
---------------------	--------	------	------	--------	------	------

Composite - 6 Fish**Bottle Code: 10/19/2023 GUNM-10 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0011 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.006
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.295 JI
TOXAPHENE ug/g	< .069

PICL-3 Cane Ck (Pickwick) - Cane Creek embayment approximately 1 mile upstream of confluence with Tennessee River.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	475	475	524	481	427	428
Length (inches)	18.70	18.70	20.63	18.94	16.81	16.85
Weight (g)	980	1,060	1,350	1,050	720	710
Weight (oz)	34.57	37.39	47.62	37.04	25.40	25.04
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-02-23	10-02-23	10-02-23	10-02-23	10-02-23	10-02-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.051	.094	.055	.111	.136	.153

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	425	440	410	458	389	325
Length (inches)	16.73	17.32	16.14	18.03	15.31	12.80
Weight (g)	1,110	1,400	980	1,380	730	440
Weight (oz)	39.15	49.38	34.57	48.68	25.75	15.52
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-02-23	10-02-23	10-02-23	10-02-23	10-02-23	10-02-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.39	.546	.201	.385	.541	.33

Franklin County

CEDF-2 Cedar Ck Res - Dam forebay to 1.0 mile upstream of the dam.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	474	459	471	510	500	534
Length (inches)	18.66	18.07	18.54	20.08	19.69	21.02
Weight (g)	824	1,182	920	1,072	1,068	1,136
Weight (oz)	29.07	41.69	32.45	37.81	37.67	40.07
Sex/Age	/5	/5	/5	/6	/5	/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.051 JI	.089 JI	.057 JI	< .051	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	432	372	443	400	439	426
Length (inches)	17.01	14.65	17.44	15.75	17.28	16.77
Weight (g)	1,504	680	1,210	948	1,100	1,082
Weight (oz)	53.05	23.99	42.68	33.44	38.80	38.17
Sex/Age	/4	/3	/4	/3	/5	/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.421	.361	.275	.26	.73	.259

GUNM-2 Coon Ck (Guntersville) - Deepest point, main creek channel, Coon Creek embayment, approximately 2 miles upstream of lake confluence.

Channel Catfish (*Ictalurus punctatus*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	573	486	454	442	421	512
Length (inches)	22.56	19.13	17.87	17.40	16.57	20.16
Weight (g)	1,964	1,052	820	724	612	1,000
Weight (oz)	69.28	37.11	28.92	25.54	21.59	35.27
Sex/Age	M/7	M/6	F/5	M/6	M/5	M/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-18-23	10-18-23	10-18-23	10-18-23	10-18-23	10-18-23
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild			Slight/Mild	Slight/Mild	Slight/Mild
MERCURY, TOTAL ug/g	< .051	.111	.113	.094	< .051	< .051

Composite - 6 Fish**Bottle Code: 10/18/2023 GUNM-2 CHC 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0065 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.023
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.19 JI
TOXAPHENE ug/g	< .069

GUNM-2 Coon Ck (Guntersville) - Deepest point, main creek channel, Coon Creek embayment, approximately 2 miles upstream of lake confluence.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	350	335	393	415	330	321
Length (inches)	13.78	13.19	15.47	16.34	12.99	12.64
Weight (g)	586	548	818	864	488	486
Weight (oz)	20.67	19.33	28.85	30.48	17.21	17.14
Sex/Age	F/3	M/3	M/5	M/7	M/2	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-18-23	10-18-23	10-18-23	10-18-23	10-18-23	10-18-23
Skin on Fillet	N	N	N	N	N	N

MERCURY, TOTAL ug/g	.151	.0547 JI	.2737	.2557	.0727 JI	.0813 JI
---------------------	------	----------	-------	-------	----------	----------

Composite - 6 Fish

Bottle Code: 10/18/2023 GUNM-2 LMB 01-06

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0014 JQ1I
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE u	< .0011 JQ1
HEXACHLOROBENZENE u	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.006
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.253 JI
TOXAPHENE ug/g	< .069

GUNM-1 Crow Ck (Guntersville) - Deepest point, main creek channel, Crow Creek embayment, approximately 0.5 mile downstream of US Hwy 72 bridge.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	532	509	540	504	477	477
Length (inches)	20.94	20.04	21.26	19.84	18.78	18.78
Weight (g)	1,350	1,314	1,516	982	662	876
Weight (oz)	47.62	46.35	53.48	34.64	23.35	30.90
Sex/Age	F/6	F/7	M/7	F/6	F/6	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild		Slight/Mild		Moderate	Slight/Mild
MERCURY, TOTAL ug/g	.111	< .051	< .051	< .051	.123	< .051

Composite - 6 Fish

Bottle Code: 9/12/2023 GUNM-1 CHC 01-06

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	< .00094 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.62
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.167 JI
TOXAPHENE ug/g	< .069

GUNM-1 Crow Ck (Guntersville) - Deepest point, main creek channel, Crow Creek embayment, approximately 0.5 mile downstream of US Hwy 72 bridge.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	461	423	429	370	376	430
Length (inches)	18.15	16.65	16.89	14.57	14.80	16.93
Weight (g)	1,302	1,306	1,208	828	736	1,234
Weight (oz)	45.93	46.07	42.61	29.21	25.96	43.53
Sex/Age	F/7	F/5	F/4	F/3	M/3	F/7
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Severe/Heavy Slight/Mild

MERCURY, TOTAL ug/g	.334	.37	.225	.226	.19	.357
---------------------	------	-----	------	------	-----	------

Composite - 6 Fish

Bottle Code: 9/12/2023 GUNM-1 LMB 01-06

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	< .00094 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.008
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.277 JI
TOXAPHENE ug/g	< .069

PICL-1 Cypress Ck (Pickwick) - Deepest point, main creek channel, Cypress Creek embayment, approximately 0.5 mile upstream of AL Hwy 20.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	433	479	377	340	465	390
Length (inches)	17.05	18.86	14.84	13.39	18.31	15.35
Weight (g)	580	990	400	270	880	480
Weight (oz)	20.46	34.92	14.11	9.52	31.04	16.93
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
Deformities	Slight/Mild					
MERCURY, TOTAL ug/g	.083 JI	.153	.291	.215	.089 JI	.113

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	422	410	395	435	390	405
Length (inches)	16.61	16.14	15.55	17.13	15.35	15.94
Weight (g)	910	950	710	1,290	740	970
Weight (oz)	32.10	33.51	25.04	45.50	26.10	34.22
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.249	.3	.119	.374	.372	.321

ELKL-1 Elk R (Wheeler) - Elk River embayment approximately river mile 6 (NE 1/4, Sec 12).**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	487	434	473	426	497	541
Length (inches)	19.17	17.09	18.62	16.77	19.57	21.30
Weight (g)	1,064	640	960	622	1,128	1,352
Weight (oz)	37.53	22.58	33.86	21.94	39.79	47.69
Sex/Age	/5	/5	/5	/5	/7	/7
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-26-23	10-26-23	10-26-23	10-26-23	10-26-23	10-26-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.051 JI	.055 JI	< .051	.154	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	405	402	411	407	388	421
Length (inches)	15.94	15.83	16.18	16.02	15.28	16.57
Weight (g)	950	936	906	1,040	904	1,000
Weight (oz)	33.51	33.02	31.96	36.68	31.89	35.27
Sex/Age	/3	/3	/3	/3	/3	/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-26-23	10-26-23	10-26-23	10-26-23	10-26-23	10-26-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.138	.057 JI	.051 JI	.099 JI	.105	.134

WHEL-6 Flint Ck (Wheeler) - Deepest point, main creek channel, Flint Creek embayment, 1 mile downstream of AL Hwy 67 bridge at public access area.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	442	584	485	521	417	392
Length (inches)	17.40	22.99	19.09	20.51	16.42	15.43
Weight (g)	750	1,660	1,100	1,060	650	440
Weight (oz)	26.46	58.55	38.80	37.39	22.93	15.52
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.107	.186	.154	.055 JI	.144	.053 JI

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	434	444	455	377	352	371
Length (inches)	17.09	17.48	17.91	14.84	13.86	14.61
Weight (g)	1,330	1,210	1,680	720	600	740
Weight (oz)	46.91	42.68	59.26	25.40	21.16	26.10
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.311	.112	.348	.124	.225	.24

FTCM-6 Flint Ck - Flint Creek downstream of Flint Creek/West Flint Creek confluence. Vicinity of US Hwy 31.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	394	382	510	442	525	369
Length (inches)	15.51	15.04	20.08	17.40	20.67	14.53
Weight (g)	420	450	1,060	650	1,280	360
Weight (oz)	14.82	15.87	37.39	22.93	45.15	12.70
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.108	.078 JI	.105	.162	.176	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	456	373	456	435	362	385
Length (inches)	17.95	14.69	17.95	17.13	14.25	15.16
Weight (g)	1,480	690	1,310	1,210	650	730
Weight (oz)	52.21	24.34	46.21	42.68	22.93	25.75
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.47	.215	.603	.382	.622	.805

WHEL-14 Fox Ck (Wheeler) - Fox Ck embayment of Wheeler Reservoir.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	460	476	434	457	517	584
Length (inches)	18.11	18.74	17.09	17.99	20.35	22.99
Weight (g)	764	1,204	694	1,012	1,300	1,766
Weight (oz)	26.95	42.47	24.48	35.70	45.86	62.29
Sex/Age	M/6	F/6	M/5	M/5	M/7	M/8
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild		Slight/Mild		Slight/Mild	Slight/Mild
MERCURY, TOTAL ug/g	.055 JI	.054 JI	.093 JI	< .051	.088 JI	< .051

Composite - 6 Fish**Bottle Code: 11/1/2023 WHEL-14 CHC 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	.0218 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLORO BENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.034
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.212 JI
TOXAPHENE ug/g	< .069

WHEL-14 Fox Ck (Wheeler) - Fox Ck embayment of Wheeler Reservoir.**Largemouth Bass (*Micropterus salmoides*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	481	465	375	365	420	353
Length (inches)	18.94	18.31	14.76	14.37	16.54	13.90
Weight (g)	1,736	1,384	930	742	1,058	690
Weight (oz)	61.24	48.82	32.80	26.17	37.32	24.34
Sex/Age	M/5	F/7	F/3	M/3	M/4	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Slight/Mild

MERCURY, TOTAL ug/g	.139	.369	.081 JI	.097 JI	.152	.114
---------------------	------	------	---------	---------	------	------

Composite - 6 Fish**Bottle Code: 11/1/2023 WHEL-14 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	.0143 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.011
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.348 JI
TOXAPHENE ug/g	< .069

HMCM-1 Halls Mill Ck - Halls Mill Creek upstream of the confluence with the Dog River.

Channel Catfish (*Ictalurus punctatus*)Fish 1

Length (mm)	500
Length (inches)	19.69
Weight (g)	1,076
Weight (oz)	37.95
Sex/Age	F/5
Age Method	Spine
Collection Date	09-19-23
Skin on Fillet	N

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.024
MERCURY, TOTAL ug/g	.235
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.212 JI
TOXAPHENE ug/g	< .069

HMCM-1 Halls Mill Ck - Halls Mill Creek upstream of the confluence with the Dog River.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	432	310	320	330	340	320
Length (inches)	17.01	12.20	12.60	12.99	13.39	12.60
Weight (g)	1,244	480	462	576	546	536
Weight (oz)	43.88	16.93	16.30	20.32	19.26	18.91
Sex/Age	M/6	M/4	F/4	M/4	M/6	M/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-19-23	09-19-23	09-19-23	09-19-23	09-19-23	09-19-23
Skin on Fillet	N	N	N	N	N	N

Lesions	Slight/Mild					
MERCURY, TOTAL ug/g	.682	.549	.734	.678	1	.655

Composite - 6 Fish

Bottle Code: 09/19/2023 HMCM-1 LMB 01-06

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.004
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.371 JI
TOXAPHENE ug/g	< .069

HMCM-1 Halls Mill Ck - Halls Mill Creek upstream of the confluence with the Dog River.

Striped Mullet (*Mugil cephalus*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5
Length (mm)	400	416	399	377	367
Length (inches)	15.75	16.38	15.71	14.84	14.45
Weight (g)	854	822	806	626	572
Weight (oz)	30.12	29.00	28.43	22.08	20.18
Sex/Age	M/2	M/4	M/2	M/2	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-19-23	09-19-23	09-19-23	09-19-23	09-19-23
Skin on Fillet	N	N	N	N	N

MERCURY, TOTAL ug/g	< .051	< .051	< .051	< .051	< .051
---------------------	--------	--------	--------	--------	--------

Composite - 5 Fish

Bottle Code: 09/19/2023 HMCM-1 STM 01-05

2,4'-DDD ug/g	< .0015 JQ3
2,4'-DDE ug/g	< .0017 JQ3
2,4'-DDT ug/g	< .0016 JQ3
4,4'-DDD ug/g	< .0019 JQ3
4,4'-DDE ug/g	< .00094 JQ3
4,4'-DDT ug/g	< .00095 JQ3
AROCHLOR 1016 ug/g	< .117 JQ3
AROCHLOR 1221 ug/g	< .125 JQ3
AROCHLOR 1232 ug/g	< .125 JQ3
AROCHLOR 1242 ug/g	< .125 JQ3
AROCHLOR 1248 ug/g	< .125 JQ3
AROCHLOR 1254 ug/g	< .037 JQ3
AROCHLOR 1260 ug/g	< .1 JQ3
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072 JQ3
CHLORPYRIFOS ug/g	< .0019 JQ3
DIELDRIN ug/g	< .00098 JQ3
ENDOSULFAN I ug/g	< .00094 JQ3
ENDOSULFAN II ug/g	< .0019 JQ3
ENDRIN ug/g	< .00082 JQ3
HEPTACHLOR ug/g	< .0011 JQ3
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ3
HEXACHLOROBENZENE ug/g	< .0015 JQ3
LINDANE ug/g	< .00097 JQ3
LIPIDS %	.12
MIREX ug/g	< .0016 JQ3
PCBS, TOTAL ug/g	< .117 JQ3
SELENIUM, TOTAL ug/g	.255 JI
TOXAPHENE ug/g	< .069 JQ3

WHEL-3 Indian Ck (Wheeler) - Deepest point, main creek channel, Indian Creek embayment, 1 mile upstream of lake confluence.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	505	445	508	561	510	535
Length (inches)	19.88	17.52	20.00	22.09	20.08	21.06
Weight (g)	1,260	720	1,190	1,680	1,300	1,000
Weight (oz)	44.45	25.40	41.98	59.26	45.86	35.27
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.128	< .051	.055 JI	.13	< .051	.099 JI

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	363	310	430	383	336	458
Length (inches)	14.29	12.20	16.93	15.08	13.23	18.03
Weight (g)	680	390	1,160	790	600	1,500
Weight (oz)	23.99	13.76	40.92	27.87	21.16	52.91
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
Deformities					Slight/Mild	
External Parasit Lesions	Slight/Mild	Slight/Mild				Slight/Mild
MERCURY, TOTAL ug/g	.147	.097 JI	.165	< .051	.194	.383

Limestone County

WHEL-5 Limestone Ck (Wheeler) - Limestone Creek embayment beginning approximately 1 mile upstream of confluence with Tennessee River.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	556	568	595	556	546	457
Length (inches)	21.89	22.36	23.43	21.89	21.50	17.99
Weight (g)	1,430	1,560	2,030	1,540	1,300	750
Weight (oz)	50.44	55.03	71.61	54.32	45.86	26.46
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.057 JI	.097 JI	< .051	.054 JI	.154	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	353	405	404	429	425	409
Length (inches)	13.90	15.94	15.91	16.89	16.73	16.10
Weight (g)	610	870	880	1,000	1,090	730
Weight (oz)	21.52	30.69	31.04	35.27	38.45	25.75
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
Disease						Slight/Mild
MERCURY, TOTAL ug/g	< .051	.135	.257	.177	.29	.182

PICL-7 Little Bear Ck - Little Bear Creek embayment approximately 0.7 miles from mouth.

Channel Catfish (*Ictalurus punctatus*)

	Fish 1	Fish 2	Fish 3
Length (mm)	566	447	433
Length (inches)	22.28	17.60	17.05
Weight (g)	1,682	794	762
Weight (oz)	59.33	28.01	26.88
Sex/Age	F/7	F/6	F/6
Age Method	Spine	Spine	Spine
Collection Date	10-10-23	10-10-23	10-10-23
Skin on Fillet	N	N	N

MERCURY, TOTAL ug/g	.102	.19	.292
---------------------	------	-----	------

Composite - 3 Fish**Bottle Code: 10/10/2023 PICL-7 CHC 01-03**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	.0062 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072 JQ1
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.012
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	< .155
TOXAPHENE ug/g	< .069

PICL-7 Little Bear Ck - Little Bear Creek embayment approximately 0.7 miles from mouth.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	431	405	421	330	365	372
Length (inches)	16.97	15.94	16.57	12.99	14.37	14.65
Weight (g)	1,190	928	1,204	518	682	712
Weight (oz)	41.98	32.73	42.47	18.27	24.06	25.12
Sex/Age	M/5	M/3	F/8	F/4	M/3	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-10-23	10-10-23	10-10-23	10-10-23	10-10-23	10-10-23
Skin on Fillet	N	N	N	N	N	N

MERCURY, TOTAL ug/g	.42	.316	.961	.623	.252	.487
---------------------	-----	------	------	------	------	------

Composite - 6 Fish**Bottle Code: 10/10/2023 PICL-7 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	.0052 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072 JQ1
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.007
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.292 JI
TOXAPHENE ug/g	< .069

LBRF-2 Little Bear Ck Res - Dam forebay area, Little Bear Creek mile 12.5.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	438	491	423	473	445	494
Length (inches)	17.24	19.33	16.65	18.62	17.52	19.45
Weight (g)	794	938	606	828	695	898
Weight (oz)	28.01	33.09	21.38	29.21	24.52	31.68
Sex/Age	/5	/8	/4	/5	/4	/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.16	.152	.123	.051 JI	.19	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	430	408	414	386	422	437
Length (inches)	16.93	16.06	16.30	15.20	16.61	17.20
Weight (g)	1,248	858	1,034	822	934	1,250
Weight (oz)	44.02	30.27	36.47	29.00	32.95	44.09
Sex/Age	/5	/4	/4	/3	/6	/5
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.66	.514	.405	1.16	.53

Jackson County

GUNM-11 Long Island Ck (Guntersville) - Deepest point, main creek channel, approximately 0.5 mile upstream from the main reservoir.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	436	497	534	496	489	497
Length (inches)	17.17	19.57	21.02	19.53	19.25	19.57
Weight (g)	570	860	1,270	960	940	860
Weight (oz)	20.11	30.34	44.80	33.86	33.16	30.34
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.051 JI	.112	< .051	.132	.052 JI	.061 JI

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	350	362	366	431	360	373
Length (inches)	13.78	14.25	14.41	16.97	14.17	14.69
Weight (g)	520	520	590	940	530	610
Weight (oz)	18.34	18.34	20.81	33.16	18.70	21.52
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.161	.174	.234	.342	.154	.167

GUNM-3B Mud Ck (Guntersville) - Mud Creek embayment upstream of Jackson Co Rd 213.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	529	503	515	556	514	499
Length (inches)	20.83	19.80	20.28	21.89	20.24	19.65
Weight (g)	1,504	1,264	1,196	1,272	1,160	1,174
Weight (oz)	53.05	44.59	42.19	44.87	40.92	41.41
Sex/Age	M/6	M/8	M/6	F/7	F/5	M/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Slight/Mild Slight/Mild

MERCURY, TOTAL ug/g < .051 .0533 JI .1216 .2092 .121 < .051

Composite - 6 Fish**Bottle Code: 9/12/2023 GUNM-3B CHC 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0068 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLORO BENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.038
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.167 JI
TOXAPHENE ug/g	< .069

GUNM-3B Mud Ck (Guntersville) - Mud Creek embayment upstream of Jackson Co Rd 213.**Largemouth Bass (*Micropterus salmoides*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	458	417	407	407	438	405
Length (inches)	18.03	16.42	16.02	16.02	17.24	15.94
Weight (g)	1,424	1,090	1,016	1,064	1,154	840
Weight (oz)	50.23	38.45	35.84	37.53	40.71	29.63
Sex/Age	M/7	M/7	M/5	M/5	M/5	M/6
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite	Severe/Heavy		Slight/Mild		Slight/Mild	
-------------------	--------------	--	-------------	--	-------------	--

MERCURY, TOTAL ug/g	.2253	.2983	.227	.1684	.8168	.2454
---------------------	-------	-------	------	-------	-------	-------

Composite - 6 Fish**Bottle Code: 9/12/2023 GUNM-3B LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0026 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLORO BENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.009
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.263 JI
TOXAPHENE ug/g	< .069

GUNM-5 N Sauty Ck (Guntersville) - Deepest point, main creek channel, North Sauty Creek embayment, immediately upstream of AL Hwy 79 bridge.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5
Length (mm)	540	546	494	516	517
Length (inches)	21.26	21.50	19.45	20.31	20.35
Weight (g)	1,392	1,534	926	1,168	1,302
Weight (oz)	49.10	54.11	32.66	41.20	45.93
Sex/Age	M/7	M/8	M/6	M/6	M/7
Age Method	Spine	Spine	Spine	Spine	Spine
Collection Date	09-13-23	09-13-23	09-13-23	09-13-23	09-13-23
Skin on Fillet	N	N	N	N	N
Internal Parasite	Severe/Heavy	Moderate	Slight/Mild	Slight/Mild	Severe/Heavy
MERCURY, TOTAL ug/g	.053 JI	< .051	< .051	.06 JI	< .051

Composite - 5 Fish**Bottle Code: 9/13/2023 GUNM-5 CHC 01-05**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ1
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.024
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	< .155
TOXAPHENE ug/g	< .069

GUNM-5 N Sauty Ck (Guntersville) - Deepest point, main creek channel, North Sauty Creek embayment, immediately upstream of AL Hwy 79 bridge.**Largemouth Bass (*Micropterus salmoides*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	450	373	400	375	378	355
Length (inches)	17.72	14.69	15.75	14.76	14.88	13.98
Weight (g)	1,278	800	894	662	594	592
Weight (oz)	45.08	28.22	31.53	23.35	20.95	20.88
Sex/Age	F/5	M/3	M/4	F/4	M/5	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-13-23	09-13-23	09-13-23	09-13-23	09-13-23	09-13-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Moderate Moderate

MERCURY, TOTAL ug/g .15 .069 JI .129 .101 .173 .053

Composite - 6 Fish**Bottle Code: 9/13/2023 GUNM-5 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.006
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.356 JI
TOXAPHENE ug/g	< .069

RBBM-1 Rabbit Ck - Rabbit Creek upstream of the confluence with Dog River.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	387	370	368	329	252	299
Length (inches)	15.24	14.57	14.49	12.95	9.92	11.77
Weight (g)	838	740	708	488	360	392
Weight (oz)	29.56	26.10	24.97	17.21	12.70	13.83
Sex/Age	M/4	M/6	F/3	F/5	M/4	M/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-20-23	09-20-23	09-20-23	09-20-23	09-20-23	09-20-23
Skin on Fillet	N	N	N	N	N	N
Tumors						Moderate
Lesions	Slight/Mild					
MERCURY, TOTAL ug/g	.746	1.13	.236	.85	.573	.545

Composite - 6 Fish

Bottle Code: 9/20/2023 RBBM-1 LMB 01-06

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.005
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.443 JI
TOXAPHENE ug/g	< .069

RBBM-1 Rabbit Ck - Rabbit Creek upstream of the confluence with Dog River.

Striped Mullet (*Mugil cephalus*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	374	415	413	406	379	426
Length (inches)	14.72	16.34	16.26	15.98	14.92	16.77
Weight (g)	632	752	786	768	678	828
Weight (oz)	22.29	26.53	27.73	27.09	23.92	29.21
Sex/Age	F/3	F/4	F/3	M/3	F/3	F/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-20-23	09-20-23	09-20-23	09-20-23	09-20-23	09-20-23
Skin on Fillet	N	N	N	N	N	N

MERCURY, TOTAL ug/g	< .051	< .051	< .051	< .051	< .051	.164
---------------------	--------	--------	--------	--------	--------	------

Composite - 6 Fish

Bottle Code: 9/20/2023 RBBM-1 STM 01-06

2,4'-DDD ug/g	< .0015 JQ3
2,4'-DDE ug/g	< .0017 JQ3
2,4'-DDT ug/g	< .0016 JQ3
4,4'-DDD ug/g	< .0019 JQ3
4,4'-DDE ug/g	< .00094 JQ3
4,4'-DDT ug/g	< .00095 JQ3
AROCHLOR 1016 ug/g	< .117 JQ3
AROCHLOR 1221 ug/g	< .125 JQ3
AROCHLOR 1232 ug/g	< .125 JQ3
AROCHLOR 1242 ug/g	< .125 JQ3
AROCHLOR 1248 ug/g	< .125 JQ3
AROCHLOR 1254 ug/g	< .037 JQ3
AROCHLOR 1260 ug/g	< .1 JQ3
ARSENIC, TOTAL ug/g	.401 JI
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072 JQ3
CHLORPYRIFOS ug/g	< .0019 JQ3
DIELDRIN ug/g	.0053 JQ3
ENDOSULFAN I ug/g	< .00094 JQ3
ENDOSULFAN II ug/g	< .0019 JQ3
ENDRIN ug/g	< .00082 JQ3
HEPTACHLOR ug/g	< .0011 JQ3
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ3
HEXACHLOROBENZENE ug/g	< .0015 JQ3
LINDANE ug/g	< .00097 JQ3
LIPIDS %	.117
MIREX ug/g	< .0016 JQ3
PCBS, TOTAL ug/g	< .117 JQ3
SELENIUM, TOTAL ug/g	.319 JI
TOXAPHENE ug/g	< .069 JQ3

GUNM-4 Roseberry Ck (Guntersville) - Deepest point, main creek channel, Roseberry/Dry Creek embayment, approximately 0.5 mile downstream of Jackson County Park.

Channel Catfish (*Ictalurus punctatus*)

	Fish 1	Fish 2
Length (mm)	430	475
Length (inches)	16.93	18.70
Weight (g)	662	758
Weight (oz)	23.35	26.74
Sex/Age	M/5	M/5
Age Method	Spine	Spine
Collection Date	09-12-23	09-12-23
Skin on Fillet	N	N

Internal Parasite Severe/Heavy Severe/Heavy

MERCURY, TOTAL ug/g < .051 .097 JI

Composite - 2 Fish

Bottle Code: 9/12/2023 GUNM-4 CHC 01-02

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	.002 JQ2
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ2
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.021
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	< .155
TOXAPHENE ug/g	< .069

GUNM-4 Roseberry Ck (Guntersville) - Deepest point, main creek channel, Roseberry/Dry Creek embayment, approximately 0.5 mile downstream of Jackson County Park.**Largemouth Bass (*Micropterus salmoides*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	390	415	360	355	380	345
Length (inches)	15.35	16.34	14.17	13.98	14.96	13.58
Weight (g)	926	1,194	616	568	768	522
Weight (oz)	32.66	42.12	21.73	20.04	27.09	18.41
Sex/Age	M/4	M/4	M/3	M/3	M/5	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23	09-12-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite	Moderate	Moderate		Severe/Heavy	Moderate	
-------------------	----------	----------	--	--------------	----------	--

MERCURY, TOTAL ug/g	.102	.185	.072 JI	< .051	.253	.109
---------------------	------	------	---------	--------	------	------

Composite - 6 Fish**Bottle Code: 9/12/2023 GUNM-4 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ2
4,4'-DDE ug/g	.0019 JQ2I
4,4'-DDT ug/g	< .00095 JQ2
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ2
ENDOSULFAN I ug/g	< .00094 JQ2
ENDOSULFAN II ug/g	< .0019 JQ2
ENDRIN ug/g	< .00082 JQ2
HEPTACHLOR ug/g	< .0011 JQ2
HEPTACHLOR EPOXIDE u	< .0011 JQ2
HEXACHLOROBENZENE u	< .0015 JQ2
LINDANE ug/g	< .00097
LIPIDS %	.003
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.288 JI
TOXAPHENE ug/g	< .069

WHEL-8 Round Island Ck (Wheeler) - Deepest point, main creek channel, Round Island Creek embayment, approximately 1.5 miles upstream of lake confluence.

Blue Catfish (*Ictalurus furcatus*)**Fish 1**

Length (mm)	650
Length (inches)	25.59
Weight (g)	2,264
Weight (oz)	79.86
Sex/Age	
Age Method	N/A
Collection Date	11-02-23
Skin on Fillet	N

Lesions Slight/Mild

MERCURY, TOTAL ug/g .226

Channel Catfish (*Ictalurus punctatus*)**Fish 1 Fish 2 Fish 3 Fish 4 Fish 5**

Length (mm)	603	395	460	541	435
Length (inches)	23.74	15.55	18.11	21.30	17.13
Weight (g)	1,650	548	884	1,448	876
Weight (oz)	58.20	19.33	31.18	51.08	30.90
Sex/Age					
Age Method	N/A	N/A	N/A	N/A	N/A
Collection Date	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23
Skin on Fillet	N	N	N	N	N

MERCURY, TOTAL ug/g < .051 .051 JI .094 JI < .051 < .051

Largemouth Bass (*Micropterus salmoides*)**Fish 1 Fish 2 Fish 3 Fish 4 Fish 5 Fish 6**

Length (mm)	396	437	403	438	520	351
Length (inches)	15.59	17.20	15.87	17.24	20.47	13.82
Weight (g)	800	1,200	930	1,100	1,200	400
Weight (oz)	28.22	42.33	32.80	38.80	42.33	14.11
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23	11-02-23
Skin on Fillet	N	N	N	N	N	N

Lesions Severe/Heavy

MERCURY, TOTAL ug/g .099 JI .054 JI .082 JI .233 .178 < .051

GUNM-6 S Sauty Ck (Guntersville) - Deepest point, main creek channel, South Sauty Creek embayment, immediately upstream of Co Rd 67 bridge.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	465	562	524	470	431	483
Length (inches)	18.31	22.13	20.63	18.50	16.97	19.02
Weight (g)	780	1,380	1,530	690	590	1,010
Weight (oz)	27.51	48.68	53.97	24.34	20.81	35.63
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	< .051	< .051	< .051	< .051	.109

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	397	369	351	390	419	348
Length (inches)	15.63	14.53	13.82	15.35	16.50	13.70
Weight (g)	910	610	500	680	1,020	550
Weight (oz)	32.10	21.52	17.64	23.99	35.98	19.40
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.054 JI	< .051	.054 JI	< .051	.241	< .051

WHEL-10 Second Ck (Wheeler) - Deepest point, main creek channel, Second Creek embayment, approximately 0.5 mile downstream of Hwy 72 bridge.

Channel Catfish (*Ictalurus punctatus*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	472	460	404	402	410	357
Length (inches)	18.58	18.11	15.91	15.83	16.14	14.06
Weight (g)	936	838	418	526	624	346
Weight (oz)	33.02	29.56	14.74	18.55	22.01	12.20
Sex/Age	M/8	M/10	F/6	F/5	M/7	F/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-03-23	10-03-23	10-03-23	10-03-23	10-03-23	10-03-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Slight/Mild

MERCURY, TOTAL ug/g	.078	< .051	.125	.075	.203	.066
---------------------	------	--------	------	------	------	------

Composite - 6 Fish**Bottle Code: 10/3/2023 WHEL-10 CHC 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.009
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.205 JI
TOXAPHENE ug/g	< .069

WHEL-10 Second Ck (Wheeler) - Deepest point, main creek channel, Second Creek embayment, approximately 0.5 mile downstream of Hwy 72 bridge.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	465	429	473	413	380	401
Length (inches)	18.31	16.89	18.62	16.26	14.96	15.79
Weight (g)	1,400	1,136	1,446	1,232	788	958
Weight (oz)	49.38	40.07	51.01	43.46	27.80	33.79
Sex/Age	F/3	F/3	F/3	F/2	M/2	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-03-23	10-03-23	10-03-23	10-03-23	10-03-23	10-03-23
Skin on Fillet	N	N	N	N	N	N

MERCURY, TOTAL ug/g	.243	.197	.233	.2	.156	.101
---------------------	------	------	------	----	------	------

Composite - 6 Fish**Bottle Code: 10/3/2023 WHEL-10 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	< .00094 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE ug/g	< .0011 JQ1
HEXACHLOROBENZENE ug/g	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.015
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.281 JI
TOXAPHENE ug/g	< .069

WILL-4 Shoal Ck (Wilson) - Deepest point, main creek channel, Shoal Creek embayment, immediately upstream of US Hwy 72 bridge.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	430	361	370	535	392	392
Length (inches)	16.93	14.21	14.57	21.06	15.43	15.43
Weight (g)	748	430	494	1,514	500	530
Weight (oz)	26.38	15.17	17.43	53.40	17.64	18.70
Sex/Age	M/6	M/6	M/4	F/9	F/5	M/4
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-11-23	10-11-23	10-11-23	10-11-23	10-11-23	10-11-23
Skin on Fillet	N	N	N	N	N	N

Internal Parasite Slight/Mild

MERCURY, TOTAL ug/g	.0517 JI	.1189	.1531	.1199	.1373	< .051
---------------------	----------	-------	-------	-------	-------	--------

Composite - 6 Fish**Bottle Code: 10/11/2023 WILL-4 CHC 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0211 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE u	< .0011 JQ1
HEXACHLOROBENZENE u	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.023
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.151 JI
TOXAPHENE ug/g	< .069

WILL-4 Shoal Ck (Wilson) - Deepest point, main creek channel, Shoal Creek embayment, immediately upstream of US Hwy 72 bridge.

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	395	405	410	335	415	387
Length (inches)	15.55	15.94	16.14	13.19	16.34	15.24
Weight (g)	936	892	916	526	1,048	858
Weight (oz)	33.02	31.46	32.31	18.55	36.97	30.27
Sex/Age	M/4	M/3	F/2	F/1	M/2	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-11-23	10-11-23	10-11-23	10-11-23	10-11-23	10-11-23
Skin on Fillet	N	N	N	N	N	N

MERCURY, TOTAL ug/g	.1354	.1426	.1113	< .051	.1161	.0964 JI
---------------------	-------	-------	-------	--------	-------	----------

Composite - 6 Fish**Bottle Code: 10/11/2023 WILL-4 LMB 01-06**

2,4'-DDD ug/g	< .0015 JQ2
2,4'-DDE ug/g	< .0017 JQ2
2,4'-DDT ug/g	< .0016 JQ2
4,4'-DDD ug/g	< .0019 JQ1
4,4'-DDE ug/g	.0036 JQ1
4,4'-DDT ug/g	< .00095 JQ1
AROCHLOR 1016 ug/g	< .117
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .037
AROCHLOR 1260 ug/g	< .1
ARSENIC, TOTAL ug/g	< .059
CADMIUM, TOTAL ug/g	< .0657
CHLORDANE, TOTAL ug/g	< .072
CHLORPYRIFOS ug/g	< .0019 JQ2
DIELDRIN ug/g	< .00098 JQ1
ENDOSULFAN I ug/g	< .00094 JQ1
ENDOSULFAN II ug/g	< .0019 JQ1
ENDRIN ug/g	< .00082 JQ1
HEPTACHLOR ug/g	< .0011 JQ1
HEPTACHLOR EPOXIDE u	< .0011 JQ1
HEXACHLOROBENZENE u	< .0015 JQ2
LINDANE ug/g	< .00097 JQ1
LIPIDS %	.008
MIREX ug/g	< .0016 JQ2
PCBS, TOTAL ug/g	< .117
SELENIUM, TOTAL ug/g	.267 JI
TOXAPHENE ug/g	< .069

GUNM-8 Short Ck (Guntersville) - Deepest point, main creek channel, Short Creek embayment, immediately upstream of AL Hwy 227 bridge.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	475	470	596	723	535	533
Length (inches)	18.70	18.50	23.46	28.46	21.06	20.98
Weight (g)	1,060	1,180	1,560	4,070	1,410	1,260
Weight (oz)	37.39	41.62	55.03	143.57	49.74	44.45
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.154	.196	.217	.184	< .051	.056 JI

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	370	381	425	432	345	416
Length (inches)	14.57	15.00	16.73	17.01	13.58	16.38
Weight (g)	660	620	1,180	1,110	560	1,020
Weight (oz)	23.28	21.87	41.62	39.15	19.75	35.98
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.054 JI	.174	.389	.623	.136	.182

Colbert County

PICL-2 Spring Ck (Pickwick) - Spring Creek embayment approximately 1 mile upstream of Pickwick Reservoir confluence.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3
Length (mm)	455	485	505
Length (inches)	17.91	19.09	19.88
Weight (g)	730	1,120	1,270
Weight (oz)	25.75	39.51	44.80
Sex/Age			
Age Method	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N
MERCURY, TOTAL ug/g	.085 JI	.122	.141

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	402	434	381	405	310	450
Length (inches)	15.83	17.09	15.00	15.94	12.20	17.72
Weight (g)	750	1,240	730	980	480	1,280
Weight (oz)	26.46	43.74	25.75	34.57	16.93	45.15
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23	11-08-23
Skin on Fillet	N	N	N	N	N	N
Deformities					Moderate	
MERCURY, TOTAL ug/g	.178	.383	.418	.277	.178	.295

WHEL-9 Spring Ck (Wheeler) - Deepest point, main creek channel, Spring Creek embayment, approximately 0.5 mile upstream of Co Rd 400 bridge.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	472	488	457	485	457	511
Length (inches)	18.58	19.21	17.99	19.09	17.99	20.12
Weight (g)	820	830	620	960	810	1,140
Weight (oz)	28.92	29.28	21.87	33.86	28.57	40.21
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.159	.155	.096 JI	.129	< .051	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	446	412	417	407	406	431
Length (inches)	17.56	16.22	16.42	16.02	15.98	16.97
Weight (g)	1,420	880	1,010	930	910	1,130
Weight (oz)	50.09	31.04	35.63	32.80	32.10	39.86
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
Lesions	Slight/Mild					
MERCURY, TOTAL ug/g	.157	.16	.179	.096 JI	.092 JI	.166

Jackson County

TENR-417 Tennessee R - At AL/TN stateline just upstream of Long Island at RM 417.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	563	539	516	465	480	466
Length (inches)	22.17	21.22	20.31	18.31	18.90	18.35
Weight (g)	1,560	1,270	1,170	810	1,000	930
Weight (oz)	55.03	44.80	41.27	28.57	35.27	32.80
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.054 JI	.071 JI	< .051	< .051	.055 JI	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	335	311	344	343	454	419
Length (inches)	13.19	12.24	13.54	13.50	17.87	16.50
Weight (g)	460	430	520	530	1,250	880
Weight (oz)	16.23	15.17	18.34	18.70	44.09	31.04
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.132	.11	.093 JI	.109	.149	.141

GUNM-7B Town Ck (Guntersville) - Town Creek embayment approximately 4 miles upstream of AL Hwy 227.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	552	472	445	595	545	407
Length (inches)	21.73	18.58	17.52	23.43	21.46	16.02
Weight (g)	1,480	930	670	2,030	1,270	430
Weight (oz)	52.21	32.80	23.63	71.61	44.80	15.17
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.051 JI	.085 JI	.093 JI	< .051	< .051	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	395	402	459	424	459	383
Length (inches)	15.55	15.83	18.07	16.69	18.07	15.08
Weight (g)	770	770	1,440	830	1,200	780
Weight (oz)	27.16	27.16	50.79	29.28	42.33	27.51
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23	11-01-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.134	.635	.407	.676	.415	.164

Marion County

UBAM-1 U Bear Ck Res - Upper Bear Creek Reservoir dam forebay area. Upper Bear Creek mile 115.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	593	534	491	580	505	519
Length (inches)	23.35	21.02	19.33	22.83	19.88	20.43
Weight (g)	2,398	1,256	1,028	1,862	1,134	1,012
Weight (oz)	84.59	44.30	36.26	65.68	40.00	35.70
Sex/Age	/7	/5	/3	/3	/3	/4
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	11-15-23	11-15-23	11-15-23	11-15-23	11-15-23	11-15-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.377	.089 JI	< .051	.12	.054 JI	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	413	425	399	440	419	387
Length (inches)	16.26	16.73	15.71	17.32	16.50	15.24
Weight (g)	1,072	1,288	900	1,398	1,248	866
Weight (oz)	37.81	45.43	31.75	49.31	44.02	30.55
Sex/Age	/3	/6	/6	/6	/3	/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-15-23	11-15-23	11-15-23	11-15-23	11-15-23	11-15-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.427	.461	.858	.808	.418	.343

TENR-277 Wheeler Res - Upstream of the dam at Tennessee River mile 277.0, near the confluence of First Creek with the main channel.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	447	391	461	552	434	424
Length (inches)	17.60	15.39	18.15	21.73	17.09	16.69
Weight (g)	766	538	930	1,990	816	688
Weight (oz)	27.02	18.98	32.80	70.20	28.78	24.27
Sex/Age	/6	/6	/7	/6	/5	/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-24-23	10-24-23	10-24-23	10-24-23	10-24-23	10-24-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.052 JI	< .051	< .051	< .051	.146	.115

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	374	431	434	404	452	361
Length (inches)	14.72	16.97	17.09	15.91	17.80	14.21
Weight (g)	936	1,098	1,338	784	1,264	798
Weight (oz)	33.02	38.73	47.20	27.65	44.59	28.15
Sex/Age	/3	/3	/3	/7	/5	/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-24-23	10-24-23	10-24-23	10-24-23	10-24-23	10-24-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.173	.086 JI	.431	.386	< .051

Limestone County

TENR-296 Wheeler Res - Mid station, main river channel, Tennessee River mile 296.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	479	468	499	477	526	578
Length (inches)	18.86	18.43	19.65	18.78	20.71	22.76
Weight (g)	1,036	1,070	1,300	966	1,460	1,620
Weight (oz)	36.54	37.74	45.86	34.07	51.50	57.14
Sex/Age	/5	/4	/5	/4	/5	/7
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-25-23	10-25-23	10-25-23	10-25-23	10-25-23	10-25-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.051 JI	< .051	.108	< .051	< .051	.149

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	391	395	370	401	365	421
Length (inches)	15.39	15.55	14.57	15.79	14.37	16.57
Weight (g)	944	960	730	966	676	1,428
Weight (oz)	33.30	33.86	25.75	34.07	23.85	50.37
Sex/Age	/3	/3	/3	/3	/3	/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-25-23	10-25-23	10-25-23	10-25-23	10-25-23	10-25-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.163	.118	.053 JI	.105	.052 JI	.115

TENR-320 Wheeler Res - Vicinity of Tennessee River mile 320. 0.9 miles upstream of Cotaco Creek and 1.0 mile downstream of Indian Creek.

Channel Catfish (*Ictalurus punctatus*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	515	512	480	492	445	483
Length (inches)	20.28	20.16	18.90	19.37	17.52	19.02
Weight (g)	1,270	1,390	830	1,000	710	980
Weight (oz)	44.80	49.03	29.28	35.27	25.04	34.57
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	< .051	< .051	.293	.158	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3
Length (mm)	321	355	396
Length (inches)	12.64	13.98	15.59
Weight (g)	310	630	860
Weight (oz)	10.93	22.22	30.34
Sex/Age			
Age Method	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N
MERCURY, TOTAL ug/g	.076 JI	.097 JI	.252

Spotted Bass (*Micropterus punctulatus*)

	Fish 1	Fish 2	Fish 3
Length (mm)	282	310	330
Length (inches)	11.10	12.20	12.99
Weight (g)	280	440	510
Weight (oz)	9.88	15.52	17.99
Sex/Age			
Age Method	N/A	N/A	N/A
Collection Date	11-07-23	11-07-23	11-07-23
Skin on Fillet	N	N	N
MERCURY, TOTAL ug/g	.074 JI	.052 JI	.084 JI

TENR-347 Wheeler Res - Wheeler Reservoir, Tennessee River mile 347, 2.0 miles downstream of Guntersville dam.**Channel Catfish (*Ictalurus punctatus*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	511	458	482	502	557	511
Length (inches)	20.12	18.03	18.98	19.76	21.93	20.12
Weight (g)	1,302	886	1,094	1,072	1,636	1,450
Weight (oz)	45.93	31.25	38.59	37.81	57.71	51.15
Sex/Age	/5	/6	/5	/5	/7	/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-23-23	10-23-23	10-23-23	10-23-23	10-23-23	10-23-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.214	< .051	< .051	< .051	.062 JI	< .051

Largemouth Bass (*Micropterus salmoides*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	381	403	487	406	424	341
Length (inches)	15.00	15.87	19.17	15.98	16.69	13.43
Weight (g)	854	1,460	1,612	1,258	1,272	650
Weight (oz)	30.12	51.50	56.86	44.37	44.87	22.93
Sex/Age	/2	/2	/7	/3	/5	/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-23-23	10-23-23	10-23-23	10-23-23	10-23-23	10-23-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.115	< .051	.316	.056 JI	.214	.095 JI

Jackson County

WDWJ-4 Widows Ck - Stretch of Widows Creek from 1.5 miles upstream of Tennessee River confluence to first bridge crossing (Million Dollar Bridge).**Largemouth Bass (*Micropterus salmoides*)**

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	412	328	334	377	482	445
Length (inches)	16.22	12.91	13.15	14.84	18.98	17.52
Weight (g)	1,030	500	490	660	1,470	1,270
Weight (oz)	36.33	17.64	17.28	23.28	51.85	44.80
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.32	.157	.229	.322	.478	.296

Spotted Sucker (*Minytrema melanops*)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	410	451	433	395	430	401
Length (inches)	16.14	17.76	17.05	15.55	16.93	15.79
Weight (g)	880	1,210	970	790	970	800
Weight (oz)	31.04	42.68	34.22	27.87	34.22	28.22
Sex/Age						
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23	10-31-23
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .051	.052 JI	.075 JI	.056 JI	.123	< .051

ADEM Qualifiers *

JI - Estimated/Between MDL & PQL

JQ1 - Estimated/QC1

JQ1I - Estimated/QC1/Between mdl & rl

JQ2 - Estimated/QC2

JQ2I - Estimated/QC2/Between mdl & rl

JQ3 - Estimated/QC3

*** See SOP #4910 for more details.**