ADEM Fish Tissue Monitoring Program 2018 Annual Report

Tennessee River Basin and Coastal Region

August 2, 2019

(amended August 5, 2020)

Alabama Department of Environmental Management

Field Operations Division

Montgomery Branch

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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 statewide screening of bioaccumulative contaminants in fish tissue, and to provide the Alabama Department of Public Health (ADPH) with 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 goals:

a) sampling locations throughout the focus basin,
b) repetitive sampling of sites where the ADPH has determined that EPA/FDA limits have been exceeded and
c) sampling remaining areas in Alabama where fish have 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.

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,
b) Coosa, Mobile, and Tombigbee Rivers,
c) Black Warrior, Perdido-Escambia, Choctawhatchee, Pea, and Chattahoochee Rivers.

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 has determined that EPA/FDA limits have 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 have not been collected for the FTMP or other areas of concern as they arise.

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 as follows. Beginning in 2017 annual fish tissue sampling will be directed toward accomplishing three main 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) Sampling remaining areas in Alabama where fish have not been collected for the FTMP or other areas of concern as they arise.

Each major drainage basin will be monitored once on a five-year rotating basis. The basin rotation will be as follows:

a) Black Warrior and Cahaba Rivers (2017)
b) Tennessee River (2018)
c) Perdido-Escambia, Choctawhatchee, Pea and Chattahoochee Rivers (2019)
d) Alabama, Coosa and Tallapoosa Rivers (2020)
e) Mobile and Tombigbee Rivers (2021)

In addition to the major river basin schedule, coastal sample locations (locations south of the I-65 Mobile River bridge) will be 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: *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) 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	EPA200.9	0.5 ug/g	0.177 ug/g		
Cadmium	EPA200.9	0.02 ug/g	0.005 ug/g		
Mercury, Total	EPA245.6	0.1 ug/g	0.015 ug/g	1.0 ug/g	0.33 ug/g
Selenium, Total	EPA200.9	0.5 ug/g	0.144 ug/g		
Chlordane, Total	SW8081A	0.01 ug/g		0.3 ug/g	
4,4-DDD	SW8081A	0.01 ug/g			
4,4-DDE	SW8081A	0.01 ug/g			
4,4-DDT	SW8081A	0.01 ug/g		Total DDT 5.0 ug/g	
2,4-DDD	SW8081A	0.01 ug/g			
2,4-DDE	SW8081A	0.01 ug/g			
2,4-DDT	SW8081A	0.01 ug/g			
Chlorpyrifos	SW8081A	0.01 ug/g			
Dieldrin	SW8081A	0.01 ug/g		0.3 ug/g	
Endosulfan I	SW8081A	0.01 ug/g			
Endosulfan II	SW8081A	0.01 ug/g			
Endrin	SW8081A	0.01 ug/g			
gamma-BHC (Lindane)	SW8081A	0.01 ug/g			
Heptachlor	SW8081A	0.01 ug/g		0.3 ug/g	
Heptachlor Epoxide	SW8081A	0.01 ug/g		0.3 ug/g	
Hexachlorobenzene	SW8081A	0.05 ug/g			
Mirex	SW8081A	0.01 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	0.35 ug/g		2.0 ug/g	
Toxaphene	SW8081A	0.05 ug/g		5.0 ug/g	
Percent lipids	SW3640A	0.10%			

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 2018, 463 fish (11 different species) from 40 locations (Figure 1 and Table 2) were collected, processed and analyzed for the FTMP. One location (SMIW-12) was sampled in April 2019 and the results are included in this report. Twenty-seven different waterbodies were sampled. Twelve locations with current consumption advisories for mercury and two locations with current consumption advisories for PFOS were sampled. To date, samples comprised of several thousand fish have been collected from 384 sites for the FTMP. Analytical results for the 2018 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 external anomalies, such as lesions, tumors, parasites and deformities. Some 90 percent of the fish observed had no anomalies, a value similar to those of previous years. The most commonly observed anomalies were lesions on the body surface and internal and external 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. CY 2018 FTMP sample locations.

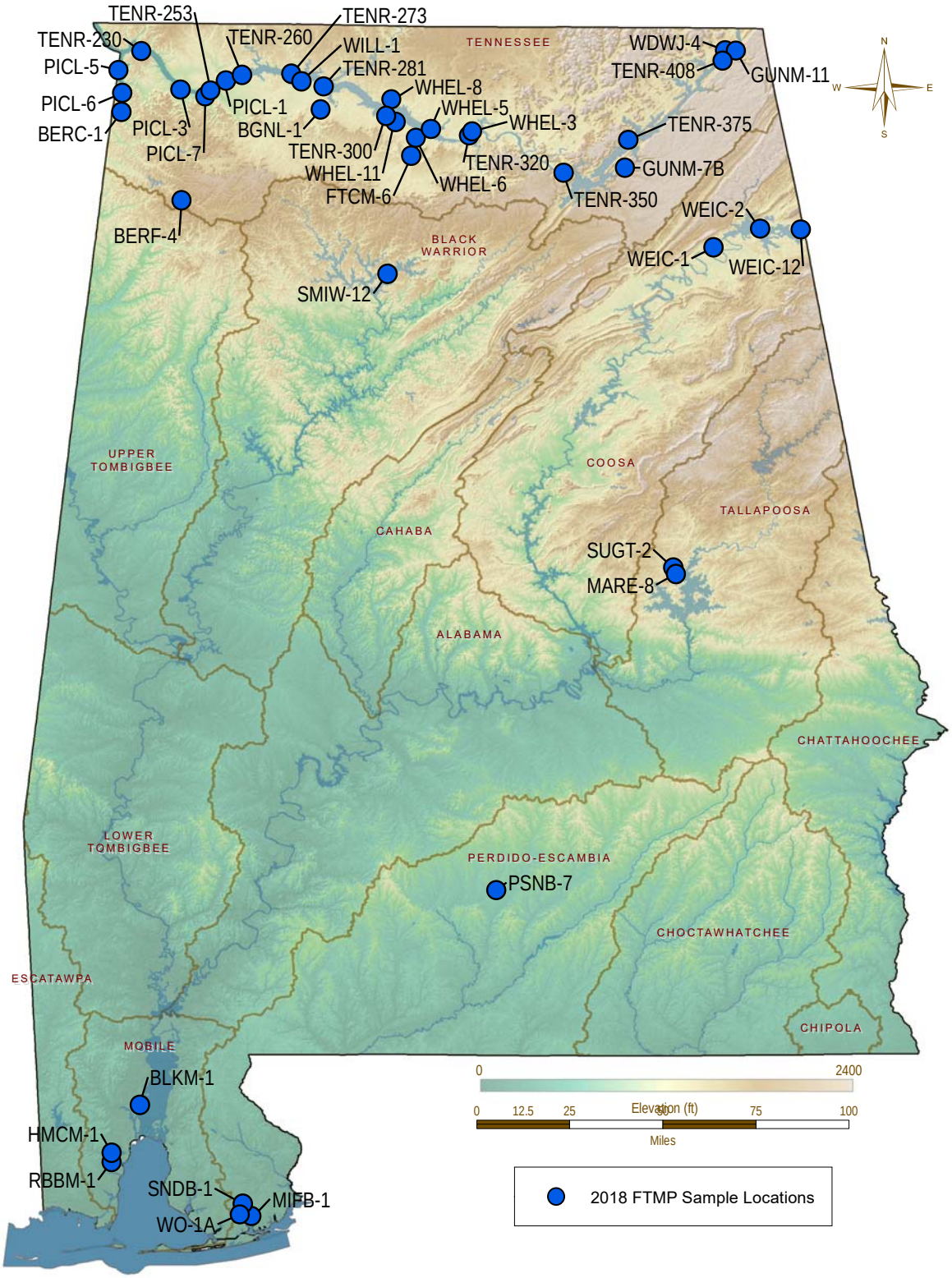

Table 2. CY 2018 FTMP sample location information; basin, locale, station ID, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Black Warrior	Ryan Ck (Lewis Smith)	SMIW-12	Cullman	Striped bass	Ryan Creek, Smith Reservoir approximately 2.2 miles upstream of Cullman County Road 222 and approximately 12 miles upstream of Sipsey Fork.
Coosa	Weiss Res	WEIC-1	Cherokee	Black crappie Spotted bass	Lower reservoir. Deepest point, main river channel, power dam forebay.
Coosa	Weiss Res	WEIC-12	Cherokee	Black crappie Largemouth bass	Deepest point, main river channel, Alabama/Georgia state line.
Coosa	Weiss Res	WEIC-2	Cherokee	Black crappie Largemouth bass	Mid reservoir. Deepest point, main river channel, immediately upstream of causeway at Cedar Bluff.
Escambia	Persimmon Ck	PSNB-7	Butler	Bluegill Redear sunfish Warmouth Spotted sucker Golden redhorse	Persimmon Ck. at Alabama Hwy 106 west of Georgiana.
Mobile	Black Ck	BLKM-1	Mobile	Striped mullet Largemouth bass	Approximately 1.4 miles upstream of Black Creek, Mobile River, Bayou Sara confluence.
Mobile	Halls Mill Ck	HMCM-1	Mobile	Striped mullet Largemouth bass	Halls Mill Creek upstream of the confluence with the Dog River.
Mobile	Rabbit Ck	RBBM-1	Mobile	Striped mullet Largemouth bass	Rabbit Creek upstream of the confluence with Dog River.

Table 2. CY 2018 FTMP sample location information; basin, locale, station ID, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Perdido	Miflin Ck	MIFB-1	Baldwin	Striped mullet Largemouth bass	Miflin Creek at Co Rd 20.
Perdido	Sandy Ck	SNDB-1	Baldwin	Striped mullet Largemouth bass	Due east of Barin Navy Field approximately 1.0 mile downstream of Highway 98 and approximately 2.0 miles upstream of the confluence with Wolf Creek.
Perdido	Wolf Ck	WO-1A	Baldwin	Striped mullet Largemouth bass	Wolf Creek at Swift Church Rd.
Tallapoosa	Elkahatchee Ck (Martin)	MARE-8	Tallapoosa	Largemouth bass	Deepest point, main creek channel, Elkahatchee Creek embayment, approx. 0.5 miles downstream of Elkahatchee/Sugar Creek confluence.
Tallapoosa	Sugar Ck (Martin)	SUGT-2	Tallapoosa	Largemouth bass	Martin Reservoir, Sugar Creek embayment.
Tennessee	Bakers Ck (Wheeler)	WHEL-11	Morgan	Spotted bass Channel catfish Largemouth bass	Bakers Creek upstream of Bakers Creek/Tennessee River confluence.
Tennessee	Bear Ck	BERC-1	Colbert	Channel catfish Spotted bass	Bear Creek at Natchez Trace Pkwy, Bear Ck mile 25.
Tennessee	Bear Ck	BERF-4	Franklin	Golden redhorse Spotted bass	Bear Creek at Franklin County Road 53, river mile 95.7.

Table 2. CY 2018 FTMP sample location information; basin, locale, station ID, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Bear Ck	PICL-6	Colbert	Channel catfish Largemouth bass	Bear Creek at Allsboro Rd.
Tennessee	Bear Ck (Pickwick)	PICL-5	Colbert	Channel catfish Largemouth bass	Main creek channel at Bear Creek embayment. Pickwick Reservoir, Bear Creek embayment, at Bear Creek mile 8.0 approximately 5 miles downstream of Buzzard Roost/Bear Creek confluence.
Tennessee	Big Nance Ck	BGNL-1	Lawrence	Golden redhorse Largemouth bass	Big Nance Creek in the vicinity of Lawrence Co. Rd. 25/Jefferson St.
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	Cane Ck (Pickwick)	PICL-3	Colbert	Channel catfish Largemouth bass	Cane Creek embayment approximately 1 mile upstream of confluence with Tennessee River.
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	Flint Ck	FTCM-6	Morgan	Channel catfish Largemouth bass	Flint Creek downstream of Flint Creek/West Flint Creek confluence. Vicinity of US Hwy 31.
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.

Table 2. CY 2018 FTMP sample location information; basin, locale, station ID, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Guntersville Res	TENR-350	Marshall	Channel catfish Largemouth bass	Dam forebay area. Tennessee River mile 350, downstream of Honeycomb Creek.
Tennessee	Guntersville Res	TENR-375	Jackson	Channel catfish Largemouth bass	Guntersville Reservoir, TRM-375 between the confluences of South Sauty Creek and the Tennessee River and North Sauty Creek and the Tennessee River.
Tennessee	Guntersville Res	TENR-408	Jackson	Channel catfish Largemouth bass	Guntersville Reservoir, vicinity of Tennessee River mile 408. Just downstream of Widows Creek.
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 Blue catfish	Little Bear Creek embayment approximately 0.7 miles from mouth.
Tennessee	Long Island Ck (Guntersville)	GUNM-11	Jackson	Channel catfish Largemouth bass	Deepest point, main creek channel, approximately 0.5 mi upstream from the main reservoir.
Tennessee	Pickwick Res	TENR-230	Colbert	Channel catfish Largemouth bass	Vicinity of Tennesse River mile 230, 2.5 miles upstream of Tennessee River/Second Creek confluence.

Table 2. CY 2018 FTMP sample location information; basin, locale, station ID, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Pickwick Res	TENR-253	Lauderdale	Channel catfish Largemouth bass	Pickwick Reservoir between Tennessee River miles 251.0-255.0, near Sheffield, AL.
Tennessee	Round Island Ck (Wheeler)	WHEL-8	Limestone	Channel catfish Largemouth bass	Deepest point, main creek channel, Round Island Creek embayment, approximately 1.5 miles upstream of lake confluence.
Tennessee	Town Ck (Guntersville)	GUNM-7B	Marshall	Channel catfish Largemouth bass	Town Creek embayment approximately 4 miles upstream of AL Hwy 227.
Tennessee	Wheeler Res	TENR-281	Lauderdale	Channel catfish Largemouth bass	Wheeler Reservoir (Tennessee River) at river mile 281.5. Approximately 2.5 miles downstream of the mouth of Elk River. Due south of Rogersville.
Tennessee	Wheeler Res	TENR-300	Limestone	Channel catfish Largemouth bass	Downstream of Bakers Creek at Tennessee R mile 300.0 to 296.0.
Tennessee	Wheeler Res	TENR-320	Madison	Channel catfish Largemouth bass	Vicinity of Tennessee River mile 320. 0.9 miles upstream of Cotaco Creek and 1.0 mile downstream of Indian Creek.
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).
Tennessee	Wilson Res	TENR-260	Lauderdale	Channel catfish Largemouth bass	Dam forebay at Tennesse River mile 259.5.

Table 2. CY 2018 FTMP sample location information; basin, locale, station ID, species collected and location description.

Basin	Locale	Station ID	County	Species Collected	Location Description
Tennessee	Wilson Res	TENR-273	Lauderdale	Channel catfish Largemouth bass	Tennessee River miles 272.0-274.0, 1.0 mile downstream of Blue Water Creek.

Table 3. CY2018 Fish Tissue Monitoring Program analytical results.

Cullman County **Lat/Lon: 34.03603 / -87.03286**

SMIW-12, Ryan Ck (Lewis Smith) - Ryan Creek, Smith Reservoir approximately 2.2 miles upstream of Cullman County Road 222 and approximately 12 miles upstream of Sipsey Fork.

Striped Bass (Morone saxatilis)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	860	735	756	773	776	871
Length (inches)	33.86	28.94	29.76	30.43	30.55	34.29
Weight (g)	8,391	5,443	5,860	6,804	6,804	8,618
Weight (oz)	295.98	192.00	206.71	240.00	240.00	303.99
Sex/Age	M	M	F	F	M	M
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	04-04-19	04-04-19	04-04-19	04-04-19	04-04-19	04-04-19
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	1.48	.733	1.1	1.14	1.04	1.22

Morgan County **Lat/Lon: 34.63767 / -87.02961**

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)	501	532	546	461	580	516
Length (inches)	19.72	20.94	21.50	18.15	22.83	20.31
Weight (g)	1,168	1,726	1,628	1,034	1,906	1,332
Weight (oz)	41.20	60.88	57.43	36.47	67.23	46.98
Sex/Age	F/5	F/7	F/5	F/6	M/6	M/4
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
Lesions	Moderate					
MERCURY, TOTAL ug/g	.055 JI	.192	.0789 JI	.305	.0872	.0616 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4
Length (mm)	412	363	357	336
Length (inches)	16.22	14.29	14.06	13.23
Weight (g)	888	754	678	602
Weight (oz)	31.32	26.60	23.92	21.23
Sex/Age	F/3	F/2	F/2	F/4
Age Method	Otolith	Otolith	Otolith	Otolith
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N
MERCURY, TOTAL ug/g	.177	.167	.174	.281
PFOA RESEARCH ng/g	1.23	< .7	< .7	.85
PFOS RESEARCH ng/g	1935	1695	5650	7575

Spotted Bass (Micropterus punctulatus)

	Fish 1	Fish 2
Length (mm)	413	357
Length (inches)	16.26	14.06
Weight (g)	990	640
Weight (oz)	34.92	22.58
Sex/Age	F/4	M/3
Age Method	Otolith	Otolith
Collection Date	10-02-18	10-02-18
Skin on Fillet	N	N
MERCURY, TOTAL ug/g	.257	.317
PFOA RESEARCH ng/g	< .7	< .7
PFOS RESEARCH ng/g	1055	415

Colbert County **Lat/Lon: 34.82400 / -88.10378**

PICL-5, Bear Ck (Pickwick) - Main creek channel at Bear Creek embayment. Pickwick Reservoir, Bear Creek embayment, at Bear Creek mile 8.0 approximately 5 miles downstream of Buzzard Roost/Bear Creek confluence.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	642	452	473	475	385	390
Length (inches)	25.28	17.80	18.62	18.70	15.16	15.35
Weight (g)	3,232	838	1,012	936	524	506
Weight (oz)	114.01	29.56	35.70	33.02	18.48	17.85
Sex/Age	M/8	M/6	M/6	M/7	F/4	M/4
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .023	.0977 JI	.286	.129	.171	.0712 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	414	383	385	442	391	363
Length (inches)	16.30	15.08	15.16	17.40	15.39	14.29
Weight (g)	988	810	850	1,360	976	624
Weight (oz)	34.85	28.57	29.98	47.97	34.43	22.01
Sex/Age	M/7	M/5	F/4	F/4	F/3	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.366	.197	.193	.168	.226	.207

Colbert County **Lat/Lon: 34.66088 / -88.09231**

BERC-1, Bear Ck - Bear Creek at Natchez Trace Pkwy, Bear Ck mile 25.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	485	475	420	390	418	460
Length (inches)	19.09	18.70	16.54	15.35	16.46	18.11
Weight (g)	1,000	822	774	516	594	848
Weight (oz)	35.27	29.00	27.30	18.20	20.95	29.91
Sex/Age	M/5	M/6	M/5	M/4	M/5	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	08-08-18	08-08-18	08-08-18	08-08-18	08-08-18	08-08-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.292	.307	.5	.0546 JI	.192	.233

	Composite - 6 Fish
Bottle Code: 8/8/2018 BERC-1 CHC 01-06	
2,4'-DDD ug/g	.002 JI
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	.016
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	4.24
MERCURY, TOTAL ug/g	.306
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Colbert County **Lat/Lon: 34.66088 / -88.09231**

BERC-1, Bear Ck - Bear Creek at Natchez Trace Pkwy, Bear Ck mile 25.

Spotted Bass (Micropterus punctulatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	378	383	452	310	280	295
Length (inches)	14.88	15.08	17.80	12.20	11.02	11.61
Weight (g)	698	684	1,192	348	284	292
Weight (oz)	24.62	24.13	42.05	12.28	10.02	10.30
Sex/Age	M/6	M/5	F/8	F/4	M/3	M/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	08-08-18	08-08-18	08-08-18	08-08-18	08-08-18	08-08-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.798	.51	.873	.425	.378	.631

	Composite - 6 Fish
Bottle Code: 8/8/2018 BERC-1 SPB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	.005 JI
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.39
MERCURY, TOTAL ug/g	.573
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Franklin County **Lat/Lon: 34.31649 / -87.85853**

BERF-4, Bear Ck - Bear Creek at Franklin County Road 53, river mile 95.7.

Golden Redhorse (Moxostoma erythrurum)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	249	277	265	284	298	335
Length (inches)	9.80	10.91	10.43	11.18	11.73	13.19
Weight (g)	122	196	198	216	238	328
Weight (oz)	4.30	6.91	6.98	7.62	8.40	11.57
Sex/Age	M	M	M	M	M	F
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	12-05-18	12-05-18	12-05-18	12-05-18	12-05-18	12-05-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.161	.249	.215	.229	.227	.313

Spotted Bass (Micropterus punctulatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	385	390	325	306	250	230
Length (inches)	15.16	15.35	12.80	12.05	9.84	9.06
Weight (g)	820	876	458	366	192	144
Weight (oz)	28.92	30.90	16.16	12.91	6.77	5.08
Sex/Age	F/7	F/4	M/7	F/4	F/3	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	12-05-18	12-05-18	12-05-18	12-05-18	12-05-18	12-05-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.958	.84	.884	.723	.512	.525

Colbert County **Lat/Lon: 34.73444 / -88.08900**

PICL-6, Bear Ck - Bear Creek at Allsboro Rd.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	345	475	475	390	430	380
Length (inches)	13.58	18.70	18.70	15.35	16.93	14.96
Weight (g)	356	1,038	944	512	628	512
Weight (oz)	12.56	36.61	33.30	18.06	22.15	18.06
Sex/Age	M/4	M/5	M/6	M/4	M/5	F/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite			Moderate			
MERCURY, TOTAL ug/g	.063 JI	.271	.184	.154	.192	.218

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	309	450	410	325	355	365
Length (inches)	12.17	17.72	16.14	12.80	13.98	14.37
Weight (g)	366	1,220	974	426	610	560
Weight (oz)	12.91	43.03	34.36	15.03	21.52	19.75
Sex/Age	M/2	F/7	F/5	M/6	F/6	F/5
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild			Severe/Heavy	Moderate	Slight/Mild
MERCURY, TOTAL ug/g	.205	.655	.449	.761	.577	.528

Lawrence County **Lat/Lon: 34.77935 / -87.39315**

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)	438	442	406	432	386	396
Length (inches)	17.24	17.40	15.98	17.01	15.20	15.59
Weight (g)	678	744	674	678	602	430
Weight (oz)	23.92	26.24	23.77	23.92	21.23	15.17
Sex/Age	F/5	M/5	M/5	F/6	M/5	M/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	09-19-18	09-19-18	09-19-18	09-19-18	09-19-18	09-19-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.124	.358	.117	.185	.377	.138

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	346	360	329	416	377	395
Length (inches)	13.62	14.17	12.95	16.38	14.84	15.55
Weight (g)	712	814	606	1,126	978	964
Weight (oz)	25.12	28.71	21.38	39.72	34.50	34.00
Sex/Age	M/2	F/3	F/3	M/4	F/4	M/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-19-18	09-19-18	09-19-18	09-19-18	09-19-18	09-19-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.115	.143	.162	.184	.185	.216

Lawrence County **Lat/Lon: 34.67000 / -87.31722**

BGNL-1, Big Nance Ck - Big Nance Creek in the vicinity of Lawrence Co. Rd. 25/Jefferson St.

Golden Redhorse (Moxostoma erythrurum)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	357	340	369	420	425	424
Length (inches)	14.06	13.39	14.53	16.54	16.73	16.69
Weight (g)	430	408	492	704	888	828
Weight (oz)	15.17	14.39	17.35	24.83	31.32	29.21
Sex/Age	F	M	M	F	F	F
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	12-06-18	12-06-18	12-06-18	12-06-18	12-06-18	12-06-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.258	.172	< .023	.311	.465	.318

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	394	381	320	286	280	291
Length (inches)	15.51	15.00	12.60	11.26	11.02	11.46
Weight (g)	898	800	438	338	286	344
Weight (oz)	31.68	28.22	15.45	11.92	10.09	12.13
Sex/Age	F/3	F/3	F/3	M/2	F/1	M/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	12-06-18	12-06-18	12-06-18	12-06-18	12-06-18	12-06-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.641	.326	.343	.453	.309	.148

Mobile County **Lat/Lon: 30.79861 / -88.02167**

BLKM-1, Black Ck - Approximately 1.4 miles upstream of Black Creek, Mobile River, Bayou Sara confluence.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	400	325	420	465	320	335
Length (inches)	15.75	12.80	16.54	18.31	12.60	13.19
Weight (g)	876	506	1,120	1,462	552	508
Weight (oz)	30.90	17.85	39.51	51.57	19.47	17.92
Sex/Age	M/4	F/2	F/5	F/6	M/1	M/6
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-07-18	11-07-18	11-07-18	11-07-18	11-07-18	11-07-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.291	.174	.574	.612	.155	.535

	Composite - 6 Fish
Bottle Code: 11/7/2018 BLKM-1 LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.16
MERCURY, TOTAL ug/g	.411
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	.164 JI
TOXAPHENE ug/g	< .0051

Mobile County **Lat/Lon: 30.79861 / -88.02167**

BLKM-1, Black Ck - Approximately 1.4 miles upstream of Black Creek, Mobile River, Bayou Sara confluence.

Striped Mullet (Mugil cephalus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	310	270	320	360	320	270
Length (inches)	12.20	10.63	12.60	14.17	12.60	10.63
Weight (g)	342	208	348	518	356	212
Weight (oz)	12.06	7.34	12.28	18.27	12.56	7.48
Sex/Age	M/2	M/1	M/2	F/3	M/2	M/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-07-18	11-07-18	11-07-18	11-07-18	11-07-18	11-07-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .023	< .023	< .023	< .023	< .023	< .023

	Composite - 6 Fish
Bottle Code: 11/7/2018 BLKM-1 STM 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	.229 JI
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	4.46
MERCURY, TOTAL ug/g	< .023
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Colbert County **Lat/Lon: 34.74694 / -87.86389**

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)	445	379	430	355	381	441
Length (inches)	17.52	14.92	16.93	13.98	15.00	17.36
Weight (g)	746	522	964	378	480	762
Weight (oz)	26.31	18.41	34.00	13.33	16.93	26.88
Sex/Age	M/5	M/4	F/6	M/3	M/4	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild	Slight/Mild	Moderate	Slight/Mild		
MERCURY, TOTAL ug/g	.059 JI	.083 JI	.07 JI	.143	.062 JI	.077 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	342	324	344	381	350	324
Length (inches)	13.46	12.76	13.54	15.00	13.78	12.76
Weight (g)	588	586	544	980	646	574
Weight (oz)	20.74	20.67	19.19	34.57	22.79	20.25
Sex/Age	F/2	M/2	F/3	F/3	M/2	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
External Parasite			Slight/Mild			
Internal Parasite					Slight/Mild	
Lesions	Slight/Mild					
MERCURY, TOTAL ug/g	.123	.118	.357	.185	.204	.24

Lauderdale County **Lat/Lon: 34.78814 / -87.69709**

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)	497	394	407	341	318	336
Length (inches)	19.57	15.51	16.02	13.43	12.52	13.23
Weight (g)	1,102	456	570	338	240	292
Weight (oz)	38.87	16.08	20.11	11.92	8.47	10.30
Sex/Age	M/5	F/7	M/4	F/5	F/4	F/4
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	09-18-18	09-18-18	09-18-18	09-18-18	09-18-18	09-18-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite		Slight/Mild		Moderate		
MERCURY, TOTAL ug/g	.0681 JI	.164	.0471 JI	.309	.0578 JI	.098 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	365	459	390	394	328	352
Length (inches)	14.37	18.07	15.35	15.51	12.91	13.86
Weight (g)	740	1,148	854	956	538	650
Weight (oz)	26.10	40.49	30.12	33.72	18.98	22.93
Sex/Age	M/3	M/6	F/3	M/3	F/2	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-18-18	09-18-18	09-18-18	09-18-18	09-18-18	09-18-18
Skin on Fillet	N	N	N	N	N	N
Deformities		Slight/Mild				
Internal Parasite		Slight/Mild				
MERCURY, TOTAL ug/g	.257	.375	.331	.18	.131	.438

Tallapoosa County **Lat/Lon: 32.87806 / -85.94361**

MARE-8, Elkahatchee Ck (Martin) - Deepest point, main creek channel, Elkahatchee Creek embayment, approx. 0.5 miles downstream of Elkahatchee/Sugar Creek confluence.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	404	412	440	370	351	309
Length (inches)	15.91	16.22	17.32	14.57	13.82	12.17
Weight (g)	814	918	1,112	696	576	376
Weight (oz)	28.71	32.38	39.22	24.55	20.32	13.26
Sex/Age	M/3	M/4	F/5	M/3	F/3	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.565	.478	.548	.325	.432	.259

Morgan County **Lat/Lon: 34.55889 / -86.94806**

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)	490	507	424	380	361	341
Length (inches)	19.29	19.96	16.69	14.96	14.21	13.43
Weight (g)	1,016	968	570	452	360	310
Weight (oz)	35.84	34.15	20.11	15.94	12.70	10.93
Sex/Age	M/8	F/6	F/4	M/4	F/4	M/3
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild	Moderate	Moderate			
Lesions		Moderate				
MERCURY, TOTAL ug/g	.197	.232	.111	.068 JI	.0826 JI	.0954 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	465	379	459	331	310	290
Length (inches)	18.31	14.92	18.07	13.03	12.20	11.42
Weight (g)	1,454	778	1,578	548	450	372
Weight (oz)	51.29	27.44	55.66	19.33	15.87	13.12
Sex/Age	F/7	F/2	F/7	M/2	M/1	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
Lesions	Slight/Mild					
MERCURY, TOTAL ug/g	.538	.194	.317	.235	.0983 JI	.213

Morgan County **Lat/Lon: 34.49114 / -86.96539**

FTCM-6, Flint Ck - Flint Creek downstream of Flint Creek/West Flint Creek confluence. Vicinity of US Hwy 31.

The largemouth bass, right fillets, were ground and 1.0g was turned over to ADPH Labs on 12/11/2019 to be analyzed for PFOA and PFOS.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	375	374	429	355	353	381
Length (inches)	14.76	14.72	16.89	13.98	13.90	15.00
Weight (g)	448	470	690	374	402	476
Weight (oz)	15.80	16.58	24.34	13.19	14.18	16.79
Sex/Age	M/3	M/5	M/6	M/3	F/3	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.107	.07 JI	.136	.199	.192	.184

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	330	341	397	414	371	446
Length (inches)	12.99	13.43	15.63	16.30	14.61	17.56
Weight (g)	524	594	896	1,024	722	1,380
Weight (oz)	18.48	20.95	31.61	36.12	25.47	48.68
Sex/Age	M/2	M/3	M/4	F/7	M/3	F/7
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.133	.186	.24	.538	.351	.699
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	44.8	103	137	20	99.3	94.8

Marshall County **Lat/Lon: 34.42378 / -86.37447**

TENR-350, Guntersville Res - Dam forebay area. Tennessee River mile 350, downstream of Honeycomb Creek.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	445	499	509	465	528	551
Length (inches)	17.52	19.65	20.04	18.31	20.79	21.69
Weight (g)	722	956	1,342	786	1,218	1,570
Weight (oz)	25.47	33.72	47.34	27.73	42.96	55.38
Sex/Age	M/4	M/6	F/4	F/6	F/6	M/7
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0914 JI	.0735 JI	.171	.0635 JI	.0654 JI	.253

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	335	334	340	341	355	353
Length (inches)	13.19	13.15	13.39	13.43	13.98	13.90
Weight (g)	568	624	582	650	662	568
Weight (oz)	20.04	22.01	20.53	22.93	23.35	20.04
Sex/Age	M/2	F/2	F/2	F/2	M/2	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0779 JI	.0617 JI	.0693 JI	.0556 JI	.109	.197

Jackson County **Lat/Lon: 34.55231 / -86.12161**

TENR-375, Guntersville Res - Guntersville Reservoir, TRM-375 between the confluences of South Sauty Creek and the Tennessee River and North Sauty Creek and the Tennessee River.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	562	404	472	590	575	506
Length (inches)	22.13	15.91	18.58	23.23	22.64	19.92
Weight (g)	1,682	590	992	1,558	2,186	772
Weight (oz)	59.33	20.81	34.99	54.96	77.11	27.23
Sex/Age	F/7	F/4	M/5	M/8	M/7	F/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.05 JI	.0807 JI	.0749 JI	.0958 JI	.0658 JI	.0976 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	341	345	448	319	366	419
Length (inches)	13.43	13.58	17.64	12.56	14.41	16.50
Weight (g)	764	666	1,536	602	752	1,106
Weight (oz)	26.95	23.49	54.18	21.23	26.53	39.01
Sex/Age	M/2	M/2	F/3	M/2	F/2	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18	10-18-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.069 JI	.0858 JI	.156	.0598 JI	.0965 JI	.133

Jackson County **Lat/Lon: 34.88591 / -85.74565**

TENR-408, Guntersville Res - Guntersville Reservoir, vicinity of Tennessee River mile 408. Just downstream of Widows Creek.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	520	486	506	414	500	472
Length (inches)	20.47	19.13	19.92	16.30	19.69	18.58
Weight (g)	1,112	978	1,080	496	1,210	940
Weight (oz)	39.22	34.50	38.10	17.50	42.68	33.16
Sex/Age	M/5	M/6	M/6	M/3	F/6	M/7
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0406 JI	.098 JI	.0653 JI	.0509 JI	.0845 JI	.0673 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	370	373	366	422	326	367
Length (inches)	14.57	14.69	14.41	16.61	12.83	14.45
Weight (g)	706	754	718	1,116	562	720
Weight (oz)	24.90	26.60	25.33	39.37	19.82	25.40
Sex/Age	F/4	F/4	F/3	F/3	F/3	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite						Slight/Mild
MERCURY, TOTAL ug/g	.171	.151	.186	.218	.158	.221

Mobile County **Lat/Lon: 30.59444 / -88.12417**

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)	350	420	340	340	270	260
Length (inches)	13.78	16.54	13.39	13.39	10.63	10.24
Weight (g)	714	1,174	600	636	294	266
Weight (oz)	25.19	41.41	21.16	22.43	10.37	9.38
Sex/Age	M/5	F/5	F/8	F/7	M/2	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-06-18	11-06-18	11-06-18	11-06-18	11-06-18	11-06-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite		Slight/Mild		Moderate		
MERCURY, TOTAL ug/g	.81	1.02	.567	.968	.54	.425

	Composite - 6 Fish
Bottle Code: 11/6/2018 HMCM-1 LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	< .1
MERCURY, TOTAL ug/g	.756
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Mobile County **Lat/Lon: 30.59444 / -88.12417**

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	Fish 6
Length (mm)	400	414	344	370	362	387
Length (inches)	15.75	16.30	13.54	14.57	14.25	15.24
Weight (g)	774	800	432	624	506	652
Weight (oz)	27.30	28.22	15.24	22.01	17.85	23.00
Sex/Age	F/3	F/4	M/2	F/3	M/3	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-06-18	11-06-18	11-06-18	11-06-18	11-06-18	11-06-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0294 JI	.0233 JI	< .023	.0285 JI	< .023	.036 JI

	Composite - 6 Fish
Bottle Code: 11/6/2018 HMCM-1 STM 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	1.22
MERCURY, TOTAL ug/g	< .023
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Madison County **Lat/Lon: 34.58431 / -86.72915**

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)	518	484	435	447	473	499
Length (inches)	20.39	19.06	17.13	17.60	18.62	19.65
Weight (g)	1,460	1,122	710	862	908	1,186
Weight (oz)	51.50	39.58	25.04	30.41	32.03	41.83
Sex/Age	F/5	M/6	M/5	M/3	F/4	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite						Moderate
2,4'-DDD ug/g	< .0009	< .0009	< .0009	< .0009	< .0009	< .0009
2,4'-DDE ug/g	.082	.103	.301	.078	.112	.068
2,4'-DDT ug/g	< .0013	< .0013	< .0013	< .0013	< .0013	< .0013
4,4'-DDD ug/g	.037	< .0019	.165	.047	.065	.067
4,4'-DDE ug/g	< .0032	< .0032	< .0032	< .0032	< .0032	< .0032
4,4'-DDT ug/g	< .0013	.002 JI	.003 JI	.002 JI	< .0013	.002 JI
AROCHLOR 1016 ug/g	< .049	< .049	< .049	< .049	< .049	< .049
AROCHLOR 1221 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1232 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1242 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1248 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1254 ug/g	< .027	< .027	< .027	< .027	< .027	< .027
AROCHLOR 1260 ug/g	< .042	< .042	< .042	< .042	< .042	< .042
PCB'S, TOTAL ug/g	< .049	< .049	< .049	< .049	< .049	< .049
ARSENIC, TOTAL ug/g	.572	.432 JI	.277 JI	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	< .02	< .02	< .02	.023 JI	< .02
CHLORDANE, TOTAL ug/g	< .0034	< .0034	< .0034	< .0034	< .0034	< .0034
CHLORPYRIFOS ug/g	< .0017	< .0017	< .0017	< .0017	< .0017	< .0017
DIELDRIN ug/g	< .0023	< .0023	< .0023	< .0023	< .0023	< .0023
ENDOSULFAN I ug/g	< .001	.002 JI	.003 JI	< .001	< .001	< .001
ENDOSULFAN II ug/g	< .0015	< .0015	< .0015	< .0015	< .0015	< .0015
ENDRIN ug/g	< .0022	< .0022	< .0022	< .0022	< .0022	< .0022
HEPTACHLOR ug/g	< .002	< .002	< .002	< .002	< .002	< .002
HEPTACHLOR EPOXIDE ug/g	.002 JI	.002 JI	< .0018	< .0018	.002 JI	.002 JI
HEXACHLOROBENZENE ug/g	< .0014	< .0014	< .0014	< .0014	< .0014	< .0014
LINDANE ug/g	< .0022	< .0022	< .0022	< .0022	< .0022	< .0022
LIPIDS %	1.56	2.265	2.015	1.55	3.36	3.95
MERCURY, TOTAL ug/g	.0845 JI	.0523 JI	.0671 JI	.054 JI	.0678 JI	.0511 JI
MIREX ug/g	< .0032	< .0032	< .0032	< .0032	< .0032	< .0032
SELENIUM, TOTAL ug/g	< .159	< .159	< .159	< .159	< .159	< .159
TOXAPHENE ug/g	< .0051	< .0051	< .0051	< .0051	< .0051	< .0051

Madison County **Lat/Lon: 34.58431 / -86.72915**

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

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	406	381	356	337	358	341
Length (inches)	15.98	15.00	14.02	13.27	14.09	13.43
Weight (g)	886	776	712	614	668	398
Weight (oz)	31.25	27.37	25.12	21.66	23.56	14.04
Sex/Age	M/5	F/2	M/4	F/2	M/3	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
2,4'-DDD ug/g	< .0009	< .0009	< .0009	< .0009	< .0009	< .0009
2,4'-DDE ug/g	.145	.038	.083	< .0014	< .0014	< .0014
2,4'-DDT ug/g	< .0013	< .0013	< .0013	< .0013	< .0013	< .0013
4,4'-DDD ug/g	.027	< .0019	.019	< .0019	< .0019	< .0019
4,4'-DDE ug/g	< .0032	< .0032	< .0032	< .0032	< .0032	< .0032
4,4'-DDT ug/g	.003 JI	< .0013	< .0013	< .0013	< .0013	< .0013
AROCHLOR 1016 ug/g	< .049	< .049	< .049	< .049	< .049	< .049
AROCHLOR 1221 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1232 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1242 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1248 ug/g	< .125	< .125	< .125	< .125	< .125	< .125
AROCHLOR 1254 ug/g	< .027	< .027	< .027	< .027	< .027	< .027
AROCHLOR 1260 ug/g	< .042	< .042	< .042	< .042	< .042	< .042
PCB'S, TOTAL ug/g	< .049	< .049	< .049	< .049	< .049	< .049
ARSENIC, TOTAL ug/g	< .18	< .18	< .18	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	.049 JI	< .02	< .02	.021 JI	.025 JI
CHLORDANE, TOTAL ug/g	< .0034	< .0034	< .0034	< .0034	< .0034	< .0034
CHLORPYRIFOS ug/g	< .0017	< .0017	< .0017	< .0017	< .0017	< .0017
DIELDRIN ug/g	< .0023	< .0023	< .0023	< .0023	< .0023	< .0023
ENDOSULFAN I ug/g	< .001	< .001	< .001	< .001	< .001	< .001
ENDOSULFAN II ug/g	< .0015	< .0015	< .0015	< .0015	< .0015	< .0015
ENDRIN ug/g	< .0022	< .0022	< .0022	< .0022	< .0022	< .0022
HEPTACHLOR ug/g	< .002	< .002	< .002	< .002	< .002	< .002
HEPTACHLOR EPOXIDE ug/g	< .0018	< .0018	< .0018	< .0018	< .0018	< .0018
HEXACHLOROBENZENE ug/g	< .0014	< .0014	< .0014	< .0014	< .0014	< .0014
LINDANE ug/g	< .0022	< .0022	< .0022	< .0022	< .0022	< .0022
LIPIDS %	.16	.24	.175	.18	.175	.17
MERCURY, TOTAL ug/g	.211	.206	.216	.156	.214	.144
MIREX ug/g	< .0032	< .0032	< .0032	< .0032	< .0032	< .0032
SELENIUM, TOTAL ug/g	.197 JI	.203 JI	.221 JI	.209 JI	.213 JI	< .159
TOXAPHENE ug/g	< .0051	< .0051	< .0051	< .0051	< .0051	< .0051

Limestone County **Lat/Lon: 34.59333 / -86.89028**

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)	471	560	513	476	475	486
Length (inches)	18.54	22.05	20.20	18.74	18.70	19.13
Weight (g)	928	1,694	1,168	1,086	920	954
Weight (oz)	32.73	59.75	41.20	38.31	32.45	33.65
Sex/Age	M/4	F/6	M/5	M/5	F/4	F/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite	Slight/Mild	Slight/Mild	Slight/Mild	Slight/Mild	Slight/Mild	Moderate
MERCURY, TOTAL ug/g	.123	.0905 JI	.157	.0542 JI	.0502 JI	.111

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	425	336	355	325	354	344
Length (inches)	16.73	13.23	13.98	12.80	13.94	13.54
Weight (g)	1,372	686	678	500	752	714
Weight (oz)	48.40	24.20	23.92	17.64	26.53	25.19
Sex/Age	F/4	M/3	M/2	M/2	M/2	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite			Moderate			
MERCURY, TOTAL ug/g	.23	.1	.166	.434	.134	.0987 JI

Colbert County **Lat/Lon: 34.72090 / -87.76660**

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

Blue Catfish (Ictalurus furcatus)

	Fish 1	Fish 2	Fish 3
Length (mm)	581	590	453
Length (inches)	22.87	23.23	17.83
Weight (g)	1,936	2,120	810
Weight (oz)	68.29	74.78	28.57
Sex/Age	M/5	M/6	M/6
Age Method	Spine	Spine	Spine
Collection Date	09-18-18	09-18-18	09-18-18
Skin on Fillet	N	N	N
MERCURY, TOTAL ug/g	.0489 JI	.0358 JI	.0444 JI

	Composite - 3 Fish
Bottle Code: 9/18/2018 PICL-7 BLC 01-03	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	.014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	.003 JI
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	.003 JI
LIPIDS %	1.59
MERCURY, TOTAL ug/g	.0412 JI
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Colbert County **Lat/Lon: 34.72090 / -87.7666(**

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

Channel Catfish (Ictalurus punctatus)

	Fish 1	
Length (mm)	507	
Length (inches)	19.96	
Weight (g)	1,208	
Weight (oz)	42.61	
Sex/Age	M/7	
Age Method	Spine	
Collection Date	09-18-18	
Skin on Fillet	N	
2,4'-DDD ug/g	< .0009	
2,4'-DDE ug/g	< .0014	
2,4'-DDT ug/g	< .0013	
4,4'-DDD ug/g	< .0019	
4,4'-DDE ug/g	< .0032	
4,4'-DDT ug/g	< .0013	
AROCHLOR 1016 ug/g	< .049	
AROCHLOR 1221 ug/g	< .125	
AROCHLOR 1232 ug/g	< .125	
AROCHLOR 1242 ug/g	< .125	
AROCHLOR 1248 ug/g	< .125	
AROCHLOR 1254 ug/g	< .027	
AROCHLOR 1260 ug/g	< .042	
PCB'S, TOTAL ug/g	< .049	
ARSENIC, TOTAL ug/g	.824	
CADMIUM, TOTAL ug/g	< .02	
CHLORDANE, TOTAL ug/g	< .0034	
CHLORPYRIFOS ug/g	< .0017	
DIELDRIN ug/g	< .0023	
ENDOSULFAN I ug/g	< .001	
ENDOSULFAN II ug/g	< .0015	
ENDRIN ug/g	< .0022	
HEPTACHLOR ug/g	< .002	
HEPTACHLOR EPOXIDE ug/g	< .0018	
HEXACHLOROBENZENE ug/g	< .0014	
LINDANE ug/g	< .0022	
LIPIDS %	1.28	
MERCURY, TOTAL ug/g	.0519	JI
MIREX ug/g	< .0032	
SELENIUM, TOTAL ug/g	< .159	
TOXAPHENE ug/g	< .0051	

Colbert County **Lat/Lon: 34.72090 / -87.7666(**

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)	358	381	396	375	336	390
Length (inches)	14.09	15.00	15.59	14.76	13.23	15.35
Weight (g)	532	730	890	650	512	752
Weight (oz)	18.77	25.75	31.39	22.93	18.06	26.53
Sex/Age	F/1	M/4	M/3	M/8	F/3	M/5
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	09-18-18	09-18-18	09-18-18	09-18-18	09-18-18	09-18-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.21	.41	.374	.614	.543	.517

	Composite - 6 Fish
Bottle Code: 9/18/2018 PICL-7 LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	.005 JI
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	.597
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.225
MERCURY, TOTAL ug/g	.297
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	.191 JI
TOXAPHENE ug/g	< .0051

Jackson County **Lat/Lon: 34.89911 / -85.70357**

GUNM-11, Long Island Ck (Guntersville) - Deepest point, main creek channel, approximately 0.5 mi upstream from the main reservoir.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	513	467	470	384	480	465
Length (inches)	20.20	18.39	18.50	15.12	18.90	18.31
Weight (g)	1,334	798	1,122	418	1,052	968
Weight (oz)	47.06	28.15	39.58	14.74	37.11	34.15
Sex/Age	F/6	F/5	F/5	M/3	M/8	F/7
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0607	.0582	.0996	.0435	.0662	.0402

	Composite - 6 Fish
Bottle Code: 10/16/2018 GUNM-11 CHC 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	1.88
MERCURY, TOTAL ug/g	.066 JI
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Jackson County **Lat/Lon: 34.89911 / -85.70357**

GUNM-11, Long Island Ck (Guntersville) - Deepest point, main creek channel, approximately 0.5 mi upstream from the main reservoir.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	415	361	352	361	431	378
Length (inches)	16.34	14.21	13.86	14.21	16.97	14.88
Weight (g)	1,002	644	648	698	988	760
Weight (oz)	35.34	22.72	22.86	24.62	34.85	26.81
Sex/Age	F/5	M/4	M/3	F/4	F/5	F/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite		Slight/Mild		Slight/Mild		
MERCURY, TOTAL ug/g	.274	.247	.223	.35	.25	.295

	Composite - 6 Fish
Bottle Code: 10/16/2018 GUNM-11 LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	.002 JI
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	1.995
MERCURY, TOTAL ug/g	.233
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	.164 JI
TOXAPHENE ug/g	< .0051

Baldwin County **Lat/Lon: 30.36370 / -87.60270**

MIFB-1, Miflin Ck - Miflin Creek at Co Rd 20.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	320	405	320	305	390	350
Length (inches)	12.60	15.94	12.60	12.01	15.35	13.78
Weight (g)	576	1,074	516	402	924	676
Weight (oz)	20.32	37.88	18.20	14.18	32.59	23.85
Sex/Age	F/2	F/2	F/2	M/1	F/2	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-28-18	11-28-18	11-28-18	11-28-18	11-28-18	11-28-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.358	.331	.187	.311	.29	.273

	Composite - 6 Fish
Bottle Code: 11/28/2018 MIFB-1 LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	.477 JI
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.43
MERCURY, TOTAL ug/g	.498
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Baldwin County **Lat/Lon: 30.36370 / -87.60270**

MIFB-1, Miflin Ck - Miflin Creek at Co Rd 20.

Striped Mullet (Mugil cephalus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	320	280	290	299	330	337
Length (inches)	12.60	11.02	11.42	11.77	12.99	13.27
Weight (g)	412	272	318	310	456	366
Weight (oz)	14.53	9.59	11.22	10.93	16.08	12.91
Sex/Age	M/2	M/2	M/2	M/1	M/2	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-28-18	11-28-18	11-28-18	11-28-18	11-28-18	11-28-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0459 JI	.0395 JI	.0431 JI	.023 JI	.055 JI	.0437 JI

	Composite - 6 Fish
Bottle Code: 11/28/2018 MIFB-1 STM 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	.051 JM
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	1.46
MERCURY, TOTAL ug/g	.0341 JI
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Butler County **Lat/Lon: 31.63376 / -86.6355(**

PSNB-7, Persimmon Ck - Persimmon Ck. at Alabama Hwy 106 west of Georgiana.

Bluegill (Lepomis macrochirus)

	Fish 1	Fish 2	Fish 3	Fish 4
Length (mm)	171	193	190	197
Length (inches)	6.73	7.60	7.48	7.76
Weight (g)	96	140	172	154
Weight (oz)	3.39	4.94	6.07	5.43
Sex/Age	M/2	M/4	M/4	M/4
Age Method	Otolith	Otolith	Otolith	Otolith
Collection Date	12-04-18	12-04-18	12-04-18	12-04-18
Skin on Fillet	N	N	N	N
2,4'-DDD ug/g	< .0009	< .0009	< .0009	< .0009
2,4'-DDE ug/g	< .0014	< .0014	< .0014	< .0014
2,4'-DDT ug/g	< .0013	< .0013	< .0013	< .0013
4,4'-DDD ug/g	< .0019	< .0019	< .0019	< .0019
4,4'-DDE ug/g	< .0032	< .0032	< .0032	< .0032
4,4'-DDT ug/g	< .0013	< .0013	< .0013	< .0013
AROCHLOR 1016 ug/g	< .049	< .049	< .049	< .049
AROCHLOR 1221 ug/g	< .125	< .125	< .125	< .125
AROCHLOR 1232 ug/g	< .125	< .125	< .125	< .125
AROCHLOR 1242 ug/g	< .125	< .125	< .125	< .125
AROCHLOR 1248 ug/g	< .125	< .125	< .125	< .125
AROCHLOR 1254 ug/g	< .027	< .027	< .027	< .027
AROCHLOR 1260 ug/g	< .042	< .042	< .042	< .042
PCB'S, TOTAL ug/g	< .049	< .049	< .049	< .049
ARSENIC, TOTAL ug/g	< .18	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	< .02	< .02	< .02
CHLORDANE, TOTAL ug/g	< .0034	< .0034	< .0034	< .0034
CHLORPYRIFOS ug/g	< .0017	< .0017	< .0017	< .0017
DIELDRIN ug/g	< .0023	< .0023	< .0023	< .0023
ENDOSULFAN I ug/g	< .001	< .001	< .001	< .001
ENDOSULFAN II ug/g	< .0015	< .0015	< .0015	< .0015
ENDRIN ug/g	< .0022	< .0022	< .0022	< .0022
HEPTACHLOR ug/g	< .002	< .002	< .002	< .002
HEPTACHLOR EPOXIDE ug/g	< .0018	< .0018	< .0018	< .0018
HEXACHLOROBENZENE ug/g	< .0014	< .0014	< .0014	< .0014
LINDANE ug/g	< .0022	< .0022	< .0022	< .0022
LIPIDS %	.27	.275	.2	.345
MERCURY, TOTAL ug/g	.32	.444	.344	.355
MIREX ug/g	< .0032	< .0032	< .0032	< .0032
SELENIUM, TOTAL ug/g	< .159	.316 JI	.267 JI	.335 JI
TOXAPHENE ug/g	< .0051	< .0051	< .0051	< .0051

Butler County **Lat/Lon: 31.63376 / -86.6355(**

PSNB-7, Persimmon Ck - Persimmon Ck. at Alabama Hwy 106 west of Georgiana.

Golden Redhorse (Moxostoma erythrurum)

	Fish 1	Fish 2	Fish 3
Length (mm)	320	384	359
Length (inches)	12.60	15.12	14.13
Weight (g)	362	676	468
Weight (oz)	12.77	23.85	16.51
Sex/Age	F	F	F
Age Method	N/A	N/A	N/A
Collection Date	12-04-18	12-04-18	12-04-18
Skin on Fillet	N	N	N
2,4'-DDD ug/g	< .0009	< .0009	< .0009
2,4'-DDE ug/g	< .0014	< .0014	< .0014
2,4'-DDT ug/g	< .0013	< .0013	< .0013
4,4'-DDD ug/g	< .0019	< .0019	< .0019
4,4'-DDE ug/g	< .0032	< .0032	< .0032
4,4'-DDT ug/g	< .0013	< .0013	< .0013
AROCHLOR 1016 ug/g	< .049	< .049	< .049
AROCHLOR 1221 ug/g	< .125	< .125	< .125
AROCHLOR 1232 ug/g	< .125	< .125	< .125
AROCHLOR 1242 ug/g	< .125	< .125	< .125
AROCHLOR 1248 ug/g	< .125	< .125	< .125
AROCHLOR 1254 ug/g	< .027	< .027	< .027
AROCHLOR 1260 ug/g	< .042	< .042	< .042
PCB'S, TOTAL ug/g	< .049	< .049	< .049
ARSENIC, TOTAL ug/g	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	< .02	< .02
CHLORDANE, TOTAL ug/g	< .0034	< .0034	< .0034
CHLORPYRIFOS ug/g	< .0017	< .0017	< .0017
DIELDRIN ug/g	< .0023	< .0023	< .0023
ENDOSULFAN I ug/g	< .001	< .001	< .001
ENDOSULFAN II ug/g	< .0015	< .0015	< .0015
ENDRIN ug/g	< .0022	< .0022	< .0022
HEPTACHLOR ug/g	< .002	< .002	< .002
HEPTACHLOR EPOXIDE ug/g	< .0018	< .0018	< .0018
HEXACHLOROBENZENE ug/g	< .0014	< .0014	< .0014
LINDANE ug/g	< .0022	< .0022	< .0022
LIPIDS %	.305	.36	.235
MERCURY, TOTAL ug/g	.518	1.02	.708
MIREX ug/g	< .0032	< .0032	< .0032
SELENIUM, TOTAL ug/g	.415 JI	.287 JI	.263 JI
TOXAPHENE ug/g	< .0051	< .0051	< .0051

Butler County **Lat/Lon: 31.63376 / -86.6355(**

PSNB-7, Persimmon Ck - Persimmon Ck. at Alabama Hwy 106 west of Georgiana.

Redear Sunfish (Lepomis microlophus)

	Fish 1	
Length (mm)	180	
Length (inches)	7.09	
Weight (g)	108	
Weight (oz)	3.81	
Sex/Age	Ukn/3	
Age Method	Otolith	
Collection Date	12-04-18	
Skin on Fillet	N	
2,4'-DDD ug/g	< .0009	
2,4'-DDE ug/g	< .0014	
2,4'-DDT ug/g	< .0013	
4,4'-DDD ug/g	< .0019	
4,4'-DDE ug/g	< .0032	
4,4'-DDT ug/g	< .0013	
AROCHLOR 1016 ug/g	< .049	
AROCHLOR 1221 ug/g	< .125	
AROCHLOR 1232 ug/g	< .125	
AROCHLOR 1242 ug/g	< .125	
AROCHLOR 1248 ug/g	< .125	
AROCHLOR 1254 ug/g	< .027	
AROCHLOR 1260 ug/g	< .042	
PCB'S, TOTAL ug/g	< .049	
ARSENIC, TOTAL ug/g	< .18	
CADMIUM, TOTAL ug/g	< .02	
CHLORDANE, TOTAL ug/g	< .0034	
CHLORPYRIFOS ug/g	< .0017	
DIELDRIN ug/g	< .0023	
ENDOSULFAN I ug/g	< .001	
ENDOSULFAN II ug/g	< .0015	
ENDRIN ug/g	< .0022	
HEPTACHLOR ug/g	< .002	
HEPTACHLOR EPOXIDE ug/g	< .0018	
HEXACHLOROBENZENE ug/g	< .0014	
LINDANE ug/g	< .0022	
LIPIDS %	.245	
MERCURY, TOTAL ug/g	.916	
MIREX ug/g	< .0032	
SELENIUM, TOTAL ug/g	.172	JI
TOXAPHENE ug/g	< .0051	

Butler County **Lat/Lon: 31.63376 / -86.6355(**

PSNB-7, Persimmon Ck - Persimmon Ck. at Alabama Hwy 106 west of Georgiana.

Spotted Sucker (Minytrema melanops)

	Fish 1	Fish 2	Fish 3
Length (mm)	382	435	293
Length (inches)	15.04	17.13	11.54
Weight (g)	738	990	270
Weight (oz)	26.03	34.92	9.52
Sex/Age	M	M	M
Age Method	N/A	N/A	N/A
Collection Date	12-04-18	12-04-18	12-04-18
Skin on Fillet	N	N	N
2,4'-DDD ug/g	< .0009	< .0009	< .0009
2,4'-DDE ug/g	< .0014	< .0014	< .0014
2,4'-DDT ug/g	< .0013	< .0013	< .0013
4,4'-DDD ug/g	< .0019	< .0019	< .0019
4,4'-DDE ug/g	< .0032	< .0032	< .0032
4,4'-DDT ug/g	< .0013	< .0013	< .0013
AROCHLOR 1016 ug/g	< .049	< .049	< .049
AROCHLOR 1221 ug/g	< .125	< .125	< .125
AROCHLOR 1232 ug/g	< .125	< .125	< .125
AROCHLOR 1242 ug/g	< .125	< .125	< .125
AROCHLOR 1248 ug/g	< .125	< .125	< .125
AROCHLOR 1254 ug/g	< .027	< .027	< .027
AROCHLOR 1260 ug/g	< .042	< .042	< .042
PCB'S, TOTAL ug/g	< .049	< .049	< .049
ARSENIC, TOTAL ug/g	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	< .02	< .02
CHLORDANE, TOTAL ug/g	< .0034	< .0034	< .0034
CHLORPYRIFOS ug/g	< .0017	< .0017	< .0017
DIELDRIN ug/g	< .0023	< .0023	< .0023
ENDOSULFAN I ug/g	< .001	< .001	< .001
ENDOSULFAN II ug/g	< .0015	< .0015	< .0015
ENDRIN ug/g	< .0022	< .0022	< .0022
HEPTACHLOR ug/g	< .002	< .002	< .002
HEPTACHLOR EPOXIDE ug/g	< .0018	< .0018	< .0018
HEXACHLOROBENZENE ug/g	< .0014	< .0014	< .0014
LINDANE ug/g	< .0022	< .0022	< .0022
LIPIDS %	.485	.19	.225
MERCURY, TOTAL ug/g	.171	.43	.114
MIREX ug/g	< .0032	< .0032	< .0032
SELENIUM, TOTAL ug/g	.347 JI	.326 JI	.239 JI
TOXAPHENE ug/g	< .0051	< .0051	< .0051

Butler County **Lat/Lon: 31.63376 / -86.6355(**

PSNB-7, Persimmon Ck - Persimmon Ck. at Alabama Hwy 106 west of Georgiana.

Warmouth (Lepomis gulosus)

	Fish 1
Length (mm)	188
Length (inches)	7.40
Weight (g)	160
Weight (oz)	5.64
Sex/Age	M/3
Age Method	N/A
Collection Date	12-04-18
Skin on Fillet	N

2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE ug/g	< .0018
HEXACHLOROBENZENE ug/g	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.225
MERCURY, TOTAL ug/g	.411
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Colbert County **Lat/Lon: 34.89692 / -88.01547**

TENR-230, Pickwick Res - Vicinity of Tennesse River mile 230, 2.5 miles upstream of Tennessee River/Second Creek confluence.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	511	604	521	471	391	401
Length (inches)	20.12	23.78	20.51	18.54	15.39	15.79
Weight (g)	1,358	1,512	1,034	750	524	520
Weight (oz)	47.90	53.33	36.47	26.46	18.48	18.34
Sex/Age	F/5	M/6	F/6	F/4	M/4	F/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-24-18	10-24-18	10-24-18	10-24-18	10-24-18	10-24-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0486 JI	.135	.0901 JI	.133	.0827 JI	.0932 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	374	376	365	341	369	390
Length (inches)	14.72	14.80	14.37	13.43	14.53	15.35
Weight (g)	850	714	714	674	806	882
Weight (oz)	29.98	25.19	25.19	23.77	28.43	31.11
Sex/Age	M/3	F/3	M/2	M/2	F/2	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-24-18	10-24-18	10-24-18	10-24-18	10-24-18	10-24-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.211	.242	.154	.438	< .023	.198

Lauderdale County **Lat/Lon: 34.74306 / -87.74656**

TENR-253, Pickwick Res - Pickwick Reservoir between Tennessee River miles 251.0-255.0, near Sheffield, AL.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	491	441	462	456	473	469
Length (inches)	19.33	17.36	18.19	17.95	18.62	18.46
Weight (g)	1,246	750	996	764	962	828
Weight (oz)	43.95	26.46	35.13	26.95	33.93	29.21
Sex/Age	F/6	F/6	M/6	M/7	M/6	F/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0882 JI	.105	.299	.103	.278	.102

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	400	359	385	467	425	373
Length (inches)	15.75	14.13	15.16	18.39	16.73	14.69
Weight (g)	1,098	816	1,144	1,568	1,388	1,064
Weight (oz)	38.73	28.78	40.35	55.31	48.96	37.53
Sex/Age	F/2	M/2	M/3	F/3	F/3	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.139	.112	.281	.247	.215	.195

Mobile County **Lat/Lon: 30.58722 / -88.12667**

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

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3
Length (mm)	260	263	274
Length (inches)	10.24	10.35	10.79
Weight (g)	256	248	278
Weight (oz)	9.03	8.75	9.81
Sex/Age	M/3	F/3	M/3
Age Method	Otolith	Otolith	Otolith
Collection Date	11-06-18	11-06-18	11-06-18
Skin on Fillet	N	N	N
Internal Parasite	Slight/Mild		Slight/Mild
MERCURY, TOTAL ug/g	.833	.783	.829

	Composite - 3 Fish
Bottle Code: 11/6/2018 RBBM-1 LMB 01-03	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.13
MERCURY, TOTAL ug/g	.638
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	.281 JI
TOXAPHENE ug/g	< .0051

Mobile County **Lat/Lon: 30.58722 / -88.12667**

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)	368	376	319	406	341	310
Length (inches)	14.49	14.80	12.56	15.98	13.43	12.20
Weight (g)	606	664	372	788	410	328
Weight (oz)	21.38	23.42	13.12	27.80	14.46	11.57
Sex/Age	F/3	M/4	M/2	F/4	M/2	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-06-18	11-06-18	11-06-18	11-06-18	11-06-18	11-06-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	< .023	.0242 JI	< .023	< .023	< .023	< .023

	Composite - 6 Fish
Bottle Code: 11/6/2018 RBBM-1 STM 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	.244 JI
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	2.99
MERCURY, TOTAL ug/g	< .023
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	.17 JI
TOXAPHENE ug/g	< .0051

Limestone County **Lat/Lon: 34.69864 / -87.05074**

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

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	480	558	495	555	511	481
Length (inches)	18.90	21.97	19.49	21.85	20.12	18.94
Weight (g)	1,176	1,844	1,130	1,890	1,558	1,190
Weight (oz)	41.48	65.05	39.86	66.67	54.96	41.98
Sex/Age	F/6	F/6	M/5	M/6	F/6	F/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite		Moderate	Slight/Mild	Slight/Mild	Slight/Mild	
MERCURY, TOTAL ug/g	.0799 JI	.0615 JI	.0439 JI	.0478 JI	.0545 JI	.0405 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	491	385	382	371	346	418
Length (inches)	19.33	15.16	15.04	14.61	13.62	16.46
Weight (g)	1,730	898	850	690	516	1,270
Weight (oz)	61.02	31.68	29.98	24.34	18.20	44.80
Sex/Age	F/6	M/4	M/4	F/2	F/2	Ukn/6
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18	10-02-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.429	.5	.349	.127	.305	.452

Baldwin County **Lat/Lon: 30.39389 / -87.62075**

SNDB-1, Sandy Ck - Due east of Barin Navy Field approximately 1.0 mile downstream of Highway 98 and approximately 2.0 miles upstream of the confluence with Wolf Creek.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	330	420	295	340	305	295
Length (inches)	12.99	16.54	11.61	13.39	12.01	11.61
Weight (g)	490	1,500	440	558	396	376
Weight (oz)	17.28	52.91	15.52	19.68	13.97	13.26
Sex/Age	M/2	F/3	M/2	M/3	M/1	M/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.621	.509	.505	.759	.785	.365

	Composite - 6 Fish
Bottle Code: 11/27/2018 SNDB-1 LMB 01-06	
2,4'-DDD ug/g	.001 JI
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.495
MERCURY, TOTAL ug/g	.49
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Baldwin County **Lat/Lon: 30.39389 / -87.62075**

SNDB-1, Sandy Ck - Due east of Barin Navy Field approximately 1.0 mile downstream of Highway 98 and approximately 2.0 miles upstream of the confluence with Wolf Creek.

Striped Mullet (Mugil cephalus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	300	310	270	310	369	261
Length (inches)	11.81	12.20	10.63	12.20	14.53	10.28
Weight (g)	316	312	212	306	460	208
Weight (oz)	11.15	11.01	7.48	10.79	16.23	7.34
Sex/Age	M/1	M/2	M/1	M/2	F/2	M/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0529	.037	.0644	.0374	.0288	.125

	Composite - 6 Fish
Bottle Code: 11/27/2018 SNDB-1 STM 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	.004 JI
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	.188 JI
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	4.465
MERCURY, TOTAL ug/g	.0446 JI
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Tallapoosa County **Lat/Lon: 32.88951 / -85.94804**

SUGT-2, Sugar Ck (Martin) - Martin Reservoir, Sugar Creek embayment.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	392	377	361	314	345	332
Length (inches)	15.43	14.84	14.21	12.36	13.58	13.07
Weight (g)	724	670	580	432	508	470
Weight (oz)	25.54	23.63	20.46	15.24	17.92	16.58
Sex/Age	F/4	M/3	M/5	F/2	F/2	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.485	.416	.548	.402	.276	.498

Marshall County **Lat/Lon: 34.44419 / -86.13508**

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)	479	561	405	585	528	453
Length (inches)	18.86	22.09	15.94	23.03	20.79	17.83
Weight (g)	1,032	1,492	500	2,130	1,340	830
Weight (oz)	36.40	52.63	17.64	75.13	47.27	29.28
Sex/Age	M/5	F/7	M/4	M/7	F/7	M/7
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0556	.0894	.0477	.0728	.0654	.11

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	358	376	352	394	438	412
Length (inches)	14.09	14.80	13.86	15.51	17.24	16.22
Weight (g)	626	750	698	808	1,184	1,064
Weight (oz)	22.08	26.46	24.62	28.50	41.76	37.53
Sex/Age	F/2	M/3	F/3	M/4	M/5	F/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18	10-17-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.154	.291	.284	.284	.483	.298

Cherokee County **Lat/Lon: 34.13481 / -85.79105**

WEIC-1, Weiss Res - Lower reservoir. Deepest point, main river channel, power dam forebay.

Black Crappie (Pomoxis nigromaculatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	276	309	295	320	311	314
Length (inches)	10.87	12.17	11.61	12.60	12.24	12.36
Weight (g)	356	490	406	542	568	516
Weight (oz)	12.56	17.28	14.32	19.12	20.04	18.20
Sex/Age	F/2	M/3	M/4	F/3	F/3	M/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-14-18	11-14-18	11-14-18	11-14-18	11-14-18	11-14-18
Skin on Fillet	N	N	N	N	N	N
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	125	107	104	116	101	116

Spotted Bass (Micropterus punctulatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	361	381	413	336	350	363
Length (inches)	14.21	15.00	16.26	13.23	13.78	14.29
Weight (g)	566	754	988	548	548	662
Weight (oz)	19.97	26.60	34.85	19.33	19.33	23.35
Sex/Age	M/3	F/2	F/3	M/1	F/2	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-14-18	11-14-18	11-14-18	11-14-18	11-14-18	11-14-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite						Slight/Mild
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	124	118	110	97.2	77.8	110

Cherokee County **Lat/Lon: 34.20244 / -85.45240**

WEIC-12, Weiss Res - Deepest point, main river channel, Alabama/Georgia state line.

Black Crappie (Pomoxis nigromaculatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	299	247	255	259	311	324
Length (inches)	11.77	9.72	10.04	10.20	12.24	12.76
Weight (g)	440	222	300	270	452	536
Weight (oz)	15.52	7.83	10.58	9.52	15.94	18.91
Sex/Age	M/3	M/1	F/2	M/2	M/2	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite		Slight/Mild				
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	113	55.8	95.5	75.5	70.5	94.8

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	434	460	335	446	394	390
Length (inches)	17.09	18.11	13.19	17.56	15.51	15.35
Weight (g)	1,136	1,406	532	1,266	946	870
Weight (oz)	40.07	49.60	18.77	44.66	33.37	30.69
Sex/Age	F/1	F/3	F/1	F/11	F/3	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18
Skin on Fillet	N	N	N	N	N	N
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	70.2	246	86.2	142	61.2	110

Cherokee County **Lat/Lon: 34.20574 / -85.61049**

WEIC-2, Weiss Res - Mid reservoir. Deepest point, main river channel, immediately upstream of causeway at Cedar Bluff.

Black Crappie (Pomoxis nigromaculatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	237	256	324	287	368	290
Length (inches)	9.33	10.08	12.76	11.30	14.49	11.42
Weight (g)	210	278	586	356	484	394
Weight (oz)	7.41	9.81	20.67	12.56	17.07	13.90
Sex/Age	M/2	F/1	F/3	F/2	M/3	M/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18
Skin on Fillet	N	N	N	N	N	N
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	53.7	74	126	98.2	102	105

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	458	459	430	476	366	364
Length (inches)	18.03	18.07	16.93	18.74	14.41	14.33
Weight (g)	1,626	1,498	1,314	1,514	770	562
Weight (oz)	57.36	52.84	46.35	53.40	27.16	19.82
Sex/Age	F/5	F/5	F/3	F/5	M/4	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18	11-13-18
Skin on Fillet	N	N	N	N	N	N
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	101	193	162	110	91.2	96.8

Lauderdale County **Lat/Lon: 34.75911 / -87.30714**

TENR-281, Wheeler Res - Wheeler Reservoir (Tennessee River) at river mile 281.5. Approximately 2.5 miles downstream of the mouth of Elk River. Due south of Rogersville.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	378	378	395	438	405	454
Length (inches)	14.88	14.88	15.55	17.24	15.94	17.87
Weight (g)	404	374	466	626	546	667
Weight (oz)	14.25	13.19	16.44	22.08	19.26	23.53
Sex/Age	F/4	M/5	F/6	M/6	F/5	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18
Skin on Fillet	N	N	N	N	N	N
Deformities		Slight/Mild				
MERCURY, TOTAL ug/g	.125	.0402 JI	.051 JI	.0655 JI	.134	.149

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	354	344	349	407	410	395
Length (inches)	13.94	13.54	13.74	16.02	16.14	15.55
Weight (g)	622	392	562	938	1,094	938
Weight (oz)	21.94	13.83	19.82	33.09	38.59	33.09
Sex/Age	M/2	F/2	M/2	M/3	F/4	F/3
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18	10-11-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite				Slight/Mild		
MERCURY, TOTAL ug/g	.108	.189	.0644 JI	.149	.169	.195
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	145	69.5	46.2	71.5	154	122

Limestone County **Lat/Lon: 34.65106 / -87.04456**

TENR-300, Wheeler Res - Downstream of Bakers Creek at Tennessee R mile 300.0 to 296.0.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	505	536	573	464	478	478
Length (inches)	19.88	21.10	22.56	18.27	18.82	18.82
Weight (g)	1,228	1,850	1,862	1,136	1,054	944
Weight (oz)	43.32	65.26	65.68	40.07	37.18	33.30
Sex/Age	F/4	F/5	M/6	F/4	F/5	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-03-18	10-03-18	10-03-18	10-03-18	10-03-18	10-03-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite				Slight/Mild		Slight/Mild
MERCURY, TOTAL ug/g	.0653 JI	.0744 JI	.0547 JI	.113	.0782 JI	.158

	Composite - 6 Fish
Bottle Code: 10/3/2018 TENR-300 CHC 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	1.68
MERCURY, TOTAL ug/g	.0522 JI
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Limestone County **Lat/Lon: 34.65106 / -87.04456**

TENR-300, Wheeler Res - Downstream of Bakers Creek at Tennessee R mile 300.0 to 296.0.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	437	435	370	380	309	334
Length (inches)	17.20	17.13	14.57	14.96	12.17	13.15
Weight (g)	1,308	1,258	836	910	480	532
Weight (oz)	46.14	44.37	29.49	32.10	16.93	18.77
Sex/Age	M/2	F/3	M/2	F/2	F/1	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-03-18	10-03-18	10-03-18	10-03-18	10-03-18	10-03-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.135	.189	.214	.108	.122	.152
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	1005	580	30	11.6	398	229

	Composite - 6 Fish
Bottle Code: 10/3/2018 TENR-300 LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	< .02
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.795
MERCURY, TOTAL ug/g	.122
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	.2 JI
TOXAPHENE ug/g	< .0051

Madison County **Lat/Lon: 34.56844 / -86.74064**

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)	535	499	566	524	464	471
Length (inches)	21.06	19.65	22.28	20.63	18.27	18.54
Weight (g)	1,462	1,180	2,068	1,760	1,174	1,204
Weight (oz)	51.57	41.62	72.95	62.08	41.41	42.47
Sex/Age	F/5	M/7	M/7	M/4	F/6	F/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.111	.0699 JI	.065 JI	.0709 JI	.142	.197

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	481	457	487	433	355	355
Length (inches)	18.94	17.99	19.17	17.05	13.98	13.98
Weight (g)	1,698	1,386	1,540	1,136	690	578
Weight (oz)	59.90	48.89	54.32	40.07	24.34	20.39
Sex/Age	F/4	F/6	F/7	F/2	M	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18	10-10-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.288	.36	.261	.178	.213	.295
PFOA RESEARCH ng/g	< .7	< .7	< .7	< .7	< .7	< .7
PFOS RESEARCH ng/g	48.8	23	368	188	19.6	21.3

Jackson County **Lat/Lon: 34.89931 / -85.74520**

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)	355	445	440	385	365	315
Length (inches)	13.98	17.52	17.32	15.16	14.37	12.40
Weight (g)	754	1,230	1,242	930	718	502
Weight (oz)	26.60	43.39	43.81	32.80	25.33	17.71
Sex/Age	F/1	F/8	F/7	F/4	M/7	M/4
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite			Moderate		Slight/Mild	Slight/Mild
ARSENIC, TOTAL ug/g	< .18	< .18	< .18	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	< .02	< .02	.037 JI	< .02	< .02
MERCURY, TOTAL ug/g	.187	.72	.286	.244	.637	.391
SELENIUM, TOTAL ug/g	< .159	.162 JI	.172 JI	.25 JI	.3 JI	.28 JI

Spotted Sucker (Minytrema melanops)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	435	410	455	440	320	300
Length (inches)	17.13	16.14	17.91	17.32	12.60	11.81
Weight (g)	1,134	926	1,258	1,194	392	324
Weight (oz)	40.00	32.66	44.37	42.12	13.83	11.43
Sex/Age	F	F	F	F	M	M
Age Method	N/A	N/A	N/A	N/A	N/A	N/A
Collection Date	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18	10-16-18
Skin on Fillet	N	N	N	N	N	N
ARSENIC, TOTAL ug/g	< .18	< .18	< .18	< .18	< .18	< .18
CADMIUM, TOTAL ug/g	< .02	.024 JI	.026 JI	< .02	< .02	< .02
MERCURY, TOTAL ug/g	.141	.102	.108	.0749 JI	.0396 JI	.0295 JI
SELENIUM, TOTAL ug/g	.229 JI	.254 JI	.25 JI	.174 JI	.233 JI	.177 JI

Lauderdale County **Lat/Lon: 34.80447 / -87.62422**

TENR-260, Wilson Res - Dam forebay at Tennesse River mile 259.5.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	402	393	466	468	438	472
Length (inches)	15.83	15.47	18.35	18.43	17.24	18.58
Weight (g)	546	508	1,010	965	653	845
Weight (oz)	19.26	17.92	35.63	34.04	23.03	29.81
Sex/Age	F/6	F/5	M/6	M/7	M/6	M/5
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-23-18	10-23-18	11-14-18	11-14-18	11-14-18	11-14-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.275	.163	.0948 JI	.0647 JI	.0297 JI	.0448 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	478	424	381	354	433	344
Length (inches)	18.82	16.69	15.00	13.94	17.05	13.54
Weight (g)	1,646	1,398	816	734	1,314	770
Weight (oz)	58.06	49.31	28.78	25.89	46.35	27.16
Sex/Age	F/5	F/3	F/2	M/2	F/3	M/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-23-18	10-23-18	10-23-18	10-23-18	10-23-18	10-23-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.216	.0816 JI	.0713 JI	.0753 JI	.209	.0763 JI

Lauderdale County **Lat/Lon: 34.80858 / -87.43186**

TENR-273, Wilson Res - Tennessee River miles 272.0-274.0, 1.0 mile downstream of Blue Water Creek.

Channel Catfish (Ictalurus punctatus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	456	474	416	410	387	446
Length (inches)	17.95	18.66	16.38	16.14	15.24	17.56
Weight (g)	804	916	540	536	518	742
Weight (oz)	28.36	32.31	19.05	18.91	18.27	26.17
Sex/Age	F/7	M/6	F/5	F/5	F/5	M/6
Age Method	Spine	Spine	Spine	Spine	Spine	Spine
Collection Date	10-25-18	10-25-18	10-25-18	10-25-18	10-25-18	10-25-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.0539 JI	.196	.0918 JI	.264	.195	.0858 JI

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	406	434	426	431	362	398
Length (inches)	15.98	17.09	16.77	16.97	14.25	15.67
Weight (g)	1,308	1,222	1,218	1,330	786	1,044
Weight (oz)	46.14	43.10	42.96	46.91	27.73	36.83
Sex/Age	M/2	F/3	M/2	M/3	F/2	F/2
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	10-25-18	10-25-18	10-25-18	10-25-18	10-25-18	10-25-18
Skin on Fillet	N	N	N	N	N	N
MERCURY, TOTAL ug/g	.212	.209	.184	.256	.0652 JI	.131

Baldwin County **Lat/Lon: 30.37331 / -87.63259**

WO-1A, Wolf Ck - Wolf Creek at Swift Church Rd.

Largemouth Bass (Micropterus salmoides)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	450	423	210	222	273	256
Length (inches)	17.72	16.65	8.27	8.74	10.75	10.08
Weight (g)	1,376	1,246	154	136	272	208
Weight (oz)	48.54	43.95	5.43	4.80	9.59	7.34
Sex/Age	F/5	F/5	M/1	F/1	F/1	F/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite		Slight/Mild				
MERCURY, TOTAL ug/g	.878	.926	.423	1.04	1.74	.717

	Composite - 6 Fish
Bottle Code: 11/27/2018 WO-1A LMB 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	.091 JM
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.255
MERCURY, TOTAL ug/g	.923
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

Baldwin County **Lat/Lon: 30.37331 / -87.63259**

WO-1A, Wolf Ck - Wolf Creek at Swift Church Rd.

Striped Mullet (Mugil cephalus)

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	Fish 6
Length (mm)	346	331	355	340	317	290
Length (inches)	13.62	13.03	13.98	13.39	12.48	11.42
Weight (g)	396	368	352	326	332	292
Weight (oz)	13.97	12.98	12.42	11.50	11.71	10.30
Sex/Age	F/2	F/2	F/2	F/2	F/2	F/1
Age Method	Otolith	Otolith	Otolith	Otolith	Otolith	Otolith
Collection Date	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18	11-27-18
Skin on Fillet	N	N	N	N	N	N
Internal Parasite					Moderate	
MERCURY, TOTAL ug/g	.0565 JI	.067 JI	< .023	.078 JI	.043 JI	.027 JI

	Composite - 6 Fish
Bottle Code: 11/27/2018 WO-1A STM 01-06	
2,4'-DDD ug/g	< .0009
2,4'-DDE ug/g	< .0014
2,4'-DDT ug/g	< .0013
4,4'-DDD ug/g	< .0019
4,4'-DDE ug/g	< .0032
4,4'-DDT ug/g	< .0013
AROCHLOR 1016 ug/g	< .049
AROCHLOR 1221 ug/g	< .125
AROCHLOR 1232 ug/g	< .125
AROCHLOR 1242 ug/g	< .125
AROCHLOR 1248 ug/g	< .125
AROCHLOR 1254 ug/g	< .027
AROCHLOR 1260 ug/g	< .042
PCB'S, TOTAL ug/g	< .049
ARSENIC, TOTAL ug/g	< .18
CADMIUM, TOTAL ug/g	.022 JM
CHLORDANE, TOTAL ug/g	< .0034
CHLORPYRIFOS ug/g	< .0017
DIELDRIN ug/g	< .0023
ENDOSULFAN I ug/g	< .001
ENDOSULFAN II ug/g	< .0015
ENDRIN ug/g	< .0022
HEPTACHLOR ug/g	< .002
HEPTACHLOR EPOXIDE u	< .0018
HEXACHLOROBENZENE u	< .0014
LINDANE ug/g	< .0022
LIPIDS %	.575
MERCURY, TOTAL ug/g	.0462 JI
MIREX ug/g	< .0032
SELENIUM, TOTAL ug/g	< .159
TOXAPHENE ug/g	< .0051

*ADEM Qualifiers **

JI - Estimated/Between MDL & PQL

JM - Estimated/Matrix Interference

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