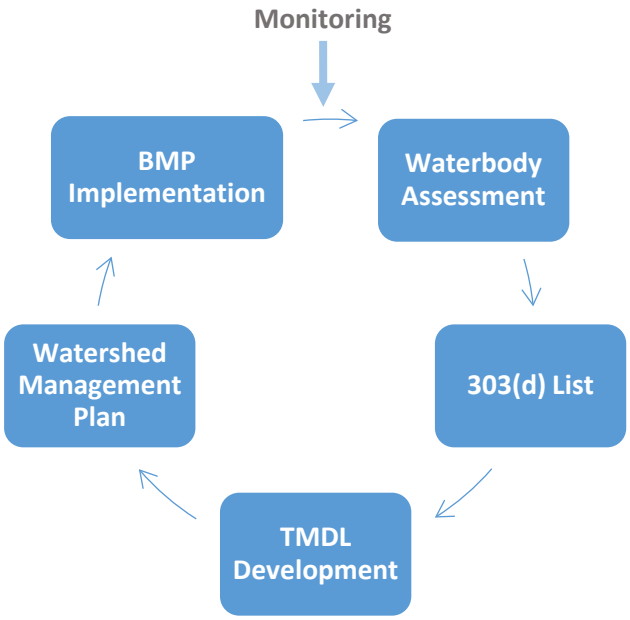
ADEM Surface Water Monitoring and Assessments Strategy

Between 1996 and 2014, ADEM's overall strategy was implemented on a five-year rotation by basin, and incorporated a combination of targeted, probabilistic, and long-term monitoring stations to meet state monitoring goals and objectives. Concentrating monitoring in one basin group enabled ADEM to identify opportunities to meet multiple monitoring objectives at a single site, increasing overall efficiency. It also created a comprehensive dataset to develop the criteria and indicators needed to meet other objectives. (ADEM 2005, ADEM 2012)

Progress made during the last ten years, as well as changes to USEPA program priorities, now allow ADEM to conduct monitoring within each basin each year, while continuing to meet monitoring goals over a five-year period. This change supports more frequent, intensive monitoring within each basin group to more accurately measure trends in water quality before and after implementation of restoration efforts, respond to data needs more quickly, and to minimize the impact of weather-related events on data collected within any one basin. The strategy also provides level loading for ADEM's labs and field offices, making better use of ADEM's available resources.



In 2015, a prioritization framework was developed to prioritize monitoring to meet program priorities within each basin group. Priorities identified included monitoring impaired, unimpaired, and unassessed waters; evaluating the effectiveness of restoration efforts; and collaborating with partner agencies and stakeholders when possible. Monitoring conducted within each basin group is planned and coordinated annually by ADEM's basin teams.

The Basin Teams were developed to improve communication among project managers, field staff, and ADEM management within Field Operations, the Water Quality Branch, and the Nonpoint Source Unit. Participation provides opportunities for Team members to become familiar with data needs and issues within their basin. Responsibilities of each Basin Team includes development of the annual basin plan, tracking and documenting State Water Quality Monitoring Plan decisions and revisions, basin team status summaries, data requests and reviews, and review of final reports.

A detailed description of the 2015 Rivers and Streams Monitoring Program (RSMP) is included in ADEM 2017.

2017 Project # 2: Wadeable and Non-wadeable Streams and Rivers Assessments

In 2017, ADEM's RSMP was awarded a CWA §319 grant through ADEM's Nonpoint Source Unit. All project milestones were completed using the 2015 Monitoring Strategy, the 2016 Surface Water Quality Assurance Program Plan (QAPP; ADEM 2016), associated Standard Operating Procedures (SOP), and the 2017 annual Surface Water Quality Monitoring Plan (SWQMP; ADEM 2017a) (Table 1). The purpose of

this document is to summarize the use and reporting of data collected as part of the 2017 RSMP CWA §319 Project.

Thirty-five monitoring locations on wadeable and non-wadeable flowing streams and rivers were sampled using FY2017 CWA §319 funds (Table 2a). Located in 33 12-digit hydrologic unit codes (HUCs) and 35 assessment units (AUs), Table 2a also lists the restoration and protection priorities of ADEM's surface water quality programs, as well as priorities of other state and federal agencies, and watershed stakeholders. Table 2b lists the 2018, 2020 and 2022 AU, HUC, use class, category, size, and upstream/downstream descriptions. This information reflects AU categories and information published in the 2020 and 2022 Integrated Water Quality Monitoring and Assessment Report (IWQMAR; http://www.adem.alabama.gov/programs/water/waterforms/2020AL-IWQMAR.pdf; http://www.adem.alabama.gov/programs/water/waterforms/2022AL-IWQMAR.pdf). The categories included in Table 2b are defined in Alabama's Consolidated Assessment and Listing Methodology (CALM) included as Appendix A in both the 2020 and 2022 IWQMAR documents. An additional 46 locations monitored using alternative funds are also listed in these tables.

All sampling was conducted in accordance with the 2017 SWQMP (ADEM 2017a). At two Category 4A waters, monthly water quality and and E. coli geomean studies were conducted. Monthly water quality sampling, E. coli geomean studies, and a diurnal dissolved oxygen study were conducted at a third Category 4A water. Only monthly water quality sampling was scheduled and conducted at one Category 5 station. However, at the request of the GA DNR, intensive water quality and organics sampling was conducted at one location on a stream flowing into GA. A periphyton survey conducted by GA DNR showed the site to be characterized by extremely low dissolved oxygen, and very high nutrient concentrations and algal biomass. At all other CWA §319 stations, macroinvertebrate or fish surveys were conducted once at each station in May through early July. Stations surveyed outside of this sampling window were sampled in conjunction with an ecoregional reference reach of similar size and geomorphology. Habitat surveys were conducted at all sites during the biological survey. *In situ* measurements (stream flow, dissolved oxygen, pH, conductivity, and turbidity) and water quality samples were collected monthly (including nutrients, water-column chlorophyll *a*, total dissolved solids, total suspended solids, and *E. coli*), semi-monthly (total and dissolved metals), or quarterly (pesticides, semi-volatiles, and atrazine), March through October, to help identify any stressors to biological communities.

Assessment unit categories for the 2020 and 2022 IWQMAR, reflecting assessments completed using the 2017 data, are provided in Table 2b. This information is also available on ADEM's website (http://www.adem.alabama.gov/programs/water/waterforms/2020AL-IWQMAR.pdf; http://www.adem.alabama.gov/programs/water/waterforms/2022AL-IWQMAR.pdf).

Twenty-five historical and candidate ecoregional reference reaches were sampled as part of this project. Sites were selected to provide data in ecoregions with limited data, or to provide the basis of comparison to assess the 2017 study streams, including five reference stations to monitor pre- and post-Total Maximum Daily Load (TMDL) conditions. Data from these candidate reference stations were thoroughly reviewed as incomplete (I), verified (V), or rejected (R) (Table 2a). Data from verified ecoregional reference reaches will be used to update ADEM's ecoregional guidelines during the 2020 Monitoring Strategy cycle. All ADEM TMDLs approved by the USEPA can be found at:http://adem.alabama.gov/programs/water/approvedTMDLs.htm

Use Support Assessment (USA) monitoring was conducted on thirty-eight Category 2 and 3 stream segments to fully assess each assessment unit. Of these, six newly monitored waters were assigned assessment units. As a result of the 2017 monitoring, nine were assessed as fully supporting their use classifications, and 12 stations were located on assessment units listed as impaired, primarily by pathogens. (Table 2b). The causes, sources and justification for listing these waters are provided in Table 3. They can also be found on ADEM's website:

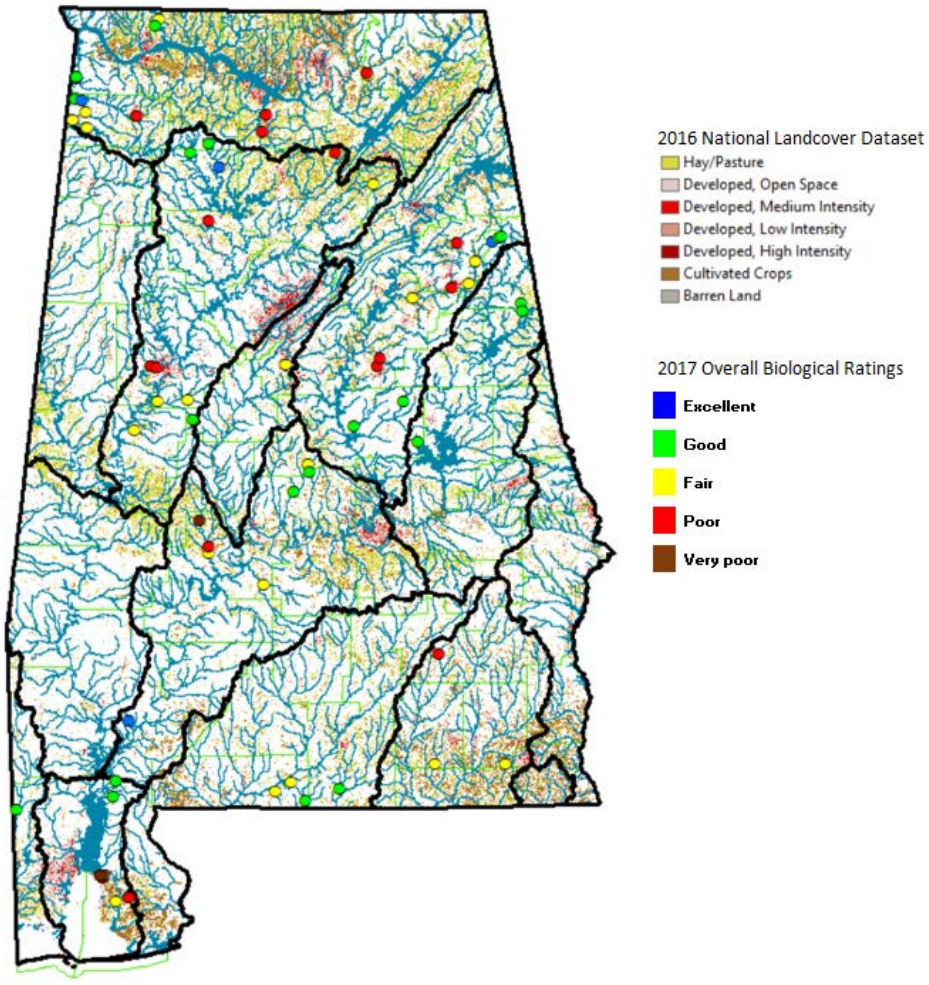
http://www.adem.alabama.gov/programs/water/wquality/2020AL303dFactSheet.pdf;
http://www.adem.alabama.gov/programs/water/wquality/2022AL303dFactSheet.pdf.

The 2017 data did not meet Alabama's assessment and listing methodology minimum data requirements to fully assess 17 of the 38 Category 2 and 3 waters, but did provide data that will contribute to future assessments (Table 2b).

Collaborating with agency partners and stakeholder groups to meet common goals was identified as an overarching goal of the ADEM 2015 Monitoring Strategy (ADEM 2017). Fifteen stations in twelve different 12-digit HUCs were monitored for ADEM's nonpoint source program to document conditions prior to the implementation of best management practices (BMP) using 2017 CWA §319 funds; pre-BMP conditions were monitored for the NPS program at an additional three stations. Eleven priority HUCs identified by the Clean Water Partnership (CWP) in 2013 were also monitored. Thirty-five sites were located within seventeen Strategic Habitat Units (SHUs), watersheds identified by the USFWS as critical habitat for threatened and endangered species (http://alh2o.org/shus/). (Table 2a)

An important objective of ADEM's Monitoring Strategy is the identification and documentation of high quality waters throughout the state. In addition to documenting and protecting current conditions, ADEM also monitors these locations to establish reference conditions for comparison to all study stations. Survey results from 26 stations indicated high quality biological conditions (Table 4).

Figure 1. Overall biological ratings from the 2017 macroinvertebrate and fish community survey results. Land uses with the highest potential to cause impacts to the checmial, physical, and biological conditions within wadeable rivers and streams is also displayed.



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ADEM. 2005. State of Alabama Water Quality Monitoring Strategy. Alabama Department of Environmental Management. July 17, 2005. Montgomery, Alabama. 239 pp.

ADEM. 2012. State of Alabama Water Quality Monitoring Strategy. Alabama Department of Environmental Management. June 19, 2012. Montgomery, Alabama. 91 pp.

ADEM 2016. Alabama Department of Environmental Management Quality Assurance Program Plan for Surface Water Quality Monitoring in Alabama. Revision 1.1. Montgomery, Alabama. 79 pp.

ADEM 2017a. ADEM's 2017 Annual Surface Water Quality Monitoring Plan. Alabama Department of Environmental Management. February 29, 2016. Montgomery, Alabama. 456 pp

ADEM. 2017b. State of Alabama Water Quality Monitoring Strategy. Alabama Department of Environmental Management. January 2017. Montgomery, Alabama. 108 pp.

ADEM. 2020a. 2020 Alabama Integrated Water Quality Monitoring and Assessment Report. Alabama Department of Environmental Management. April 2018. Montgomery, Alabama. 630 pp.

ADEM. 2020b. Alabama's 2020 §303(d) List Fact Sheet. Alabama Department of Environmental Management. April 2020. Montgomery, Alabama. 23 pp.

Table 1. Milestones of the 2017 CWA §319 grant, project #2 (streams and rivers) to ensure that implementation of the project was timely and reasonable.

Activity	Timeline	Responsible Entity	Implementation
Milestone 1: The 2016 River Basin Projects reviewed and revised in Arcview Output 1: Tracking system for 2017 data updated Outcome 1: Data needs for wadeable flowing reaches prioritized	Oct-Nov 2016	ADEM-FOD	100% Complete
Milestone 2: Site Reconnaissance conducted Output 2: Enter recon data into ALAWADR database Outcome 2-a: Data is assessed and final monitoring sites selected Outcome 2-b: Basin wide, subwatershed, and other priority monitoring area maps generated	Oct-Nov 2016	ADEM-FOD	100% Complete
Milestone 3: Reference, ambient, and probabilistic sites provide water quality gradient conditions Output 3: Surface water monitoring sites selected to meet the goals of a mix of project priorities and programs Outcome3-a: Monitoring sites delineated Outcome 3-b: ADEM's Surface Water Program Prioritization Framework calculated based on 2011 landuse and other factors	Oct 2016-Jan 2017	ADEM-FOD	100% Complete
Milestone 4: Selected site monitored Output 4: Water quality and other ecologically significant data are collected Outcome 4-a: Macroinvertebrate survey conducted Outcome 4-c: Fish community survey conducted	Mar-Oct 2017	ADEM-FOD	100% Complete
Milestone 5: Process biological samples Output 5: Macroinvertebrate and fish samples identified Outcome 5-a: Biological data entered into the ORACLE database	May 2017-Apr 2018	ADEM-FOD	100% Complete
Milestone 6: Monitoring data analyzed Output 6: Record data for tracking, review, and analyses Outcome 6-a: Data reviewed for quality assurance /control	Mar 2017-Apr 2018	ADEM-FOD	100% Complete
Milestone 7: Completion of monitoring summary reports Output 7: Facilitate the completion of the Integrated Report Outcome 7-a: A summary report of the sub-watersheds monitored as part of the project is completed	Apr 2018-Dec 2020**	ADEM-FOD	100% Complete
Milestone 8: Data is submitted to EPA WQX database Output 8: Facilitate the development GIS maps , data tables and summaries, etc, as applicable Outcome 8-a: Data is made available to the public and private sectors	Mar 2017-Nov 2018	ADEM-FOD	100% Complete

Table 2a. Description of stations sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers). Protection and restoration priorities, reference status, and indicators used to assess the site are also provided. Habitat and biological ratings are also provided.

Station	Stream	County	Eco	Area (mi^2)	Description	12 digit HUC	Assessment Unit	Latitude	Longitude	Protection/Restoration Priorities						Ref	Habitat	Biological Conditions	
										SHU	NPS	NWQI/ SWCD	CWP	Stake-holders	TMDL			Macroin-vertebrates	Fish
Alabama																			
o BCH-1	Bogue Chitto Ck	Dallas	65A	327.0	Bogue Chitto Ck at Dallas Co Rd 115	031502030110	AL03150203-0110-100	32.27683	-87.28166	26							Fair		Fair
o BCH-2	Bogue Chitto Ck	Dallas	65A	282.0	Bogue Chitto Ck at AL Hwy 22	031502030109	AL03150203-0110-100	32.30654	-87.28035	26							Fair		Poor
o BGUD-3	Bogue Chitto Ck	Dallas	65A	95.4	Bogue Chitto Ck at US Hwy 80	031502030107	AL03150203-0110-100	32.43962	-87.33515	26			ARC				Poor		Very poor
DRCD-1	Dry Cedar Ck	Dallas	65B	120.1	Dry Cedar Ck at Dallas Co Rd 85	031502030106	AL03150203-0206-100	32.11689	-86.96027	26						R	Fair		Fair
LMBA-1	Little Mulberry Ck	Autauga	65I	70.9	Little Mulberry Ck at Autauga Co Rd 8	031502010902	AL03150201-0903-100	32.58247	-86.77757							V	Good	Good	
LRDC-1	Little Reedy Ck	Clarke	65F	10.5	Little Reedy Ck at Gainestowne Rd	031502040603	AL03150204-0603-300	31.43208	-87.74533		Post-					V	Good	Excellent	
o MAJB-1	Majors Ck	Baldwin	65F	44.6	Majors Ck at AL Hwy 59	031502040704	AL03150204-0704-100	31.12892	-87.81803								Fair	Good	
Black Warrior																			
BRSL-3	Brushy Ck	Lawrence	68E	8.9	Brushy Ck upstream of North Loop of Co Rd 73 (east of Co Rd 70), in Bankhead National Forest	031601100201	AL03160110-0203-103	34.33070	-87.28620	22						V	Good	Good-excellent	Good
BSAT-1	Big Sandy Ck	Tuscaloosa	65I	173.2	AL Hwy 69, north of Moundville	031601130105	AL03160113-0105-100	33.03500	-87.58750							V	Fair		Fair
BSAT-59A	Bear Ck	Tuscaloosa	65I	18.4	Bear Ck at unnamed Tuscaloosa Co Rd nr AL Hwy 82	031601130102	AL03160113-0102-100	33.04253	-87.40722							R	Poor	Fair	
o CLEM-1	Clear Ck	Marshall	68D	24.5	Clear Ck at Dyar Rd	031601110103	AL03160111-0103-100	34.12865	-86.29165	23				TNC			Good	Fair	
FIMH-40C	Fivemile Ck	Hale	65I	106.4	Fivemile Ck at Hale Co Rd 42	031601130402	AL03160113-0402-100	32.89065	-87.73073					FWS		R	Poor	Fair-poor	Fair
o INMW-1	Inman Ck	Winston	68E	5.3	Inman Ck at unnamed Forest Service Rd in the Bankhead National Forest	031601100203	AL03160110-0203-110	34.21590	-87.22400	22					Pre-		Good	Excellent-good	
o MLCT-4	Mill Ck	Tuscaloosa	65I	15.6	Mill Ck at Oliver Dam Rd	031601130201	AL03160113-0201-100	33.20974	-87.59937								Poor	Poor	
o RMA-3	Riley Maze Ck	Cullman	68D	5.1	Riley Maze Ck at New Harmony Rd, approx 1.25 mi downstream of Arab WWTP dishcharge	031601090101	AL03160109-0101-150	34.28450	-86.51719						Pre-		Fair	Poor	
SSB-2	S Sandy Ck	Bibb	65I	1.3	South Sandy Ck approximately 0.5 mi upstream of National Forest Rd 726	031601130103	AL03160113-0103-100	32.94268	-87.37584							V	Fair	Good	
SF-1	Sipsey Fk	Winston	68E	89.2	Sipsey Fk at Winston Co Rd 60 (Cranal Rd)	031601100103	AL03160110-0104-103	34.28558	-87.39906	22						V	Good	Good-fair	Good
o SPRW-53	Spring	Walker	68F	7.2	Spring Ck at Fall City Rd	031601090306	AL03160109-0306-100	33.94302	-87.28626								Poor	Poor	
o TTHT-1	Tater Hill Ck	Tuscaloosa	65I	1.0	Tater Hill Ck at Commerce Rd	031601130202	AL03160113-0202-300	33.21200	-87.62847					X			Poor	Poor	
Blackwater																			
o BRE-1	Bear Ck	Escambia	65F	28.2	Bear Ck on dirt trail off Escambia Co Rd 51, approximately 0.7 miles upstream of confluence with Blackwater R. (off old Ranch Rd)	031401040103	AL03140104-0103-100	31.03334	-86.70961						Post-	V	Fair	Good-excellent	
Cahaba																			
o BUCS-50	Buck Ck	Shelby	67F	8.1	Bucks Ck at AL Hwy 119	031502020203	AL03150202-0203-103	33.21985	-86.82410	27			ARC, U				Poor	Fair	
Chattahoochee																			
o TOWR-1	Town Ck	Randolph	45A	1.4	Town Ck at Randolph Co Rd 513	031300020602	AL03130002-0602-100	33.30478	-85.27879					GA DNR					
Chipola																			
COPH-2	Cooper Ck	Houston	65G	4.2	Cooper Ck at Sanitary Dairy Rd	031300120201	AL03130012-0201-410	31.16509	-85.32047	50				NPS					
Choctawhatchee																			
o BRH-1	Bear Ck	Houston	65G	19.0	Bear Ck on unnamed Houston Co Rd, West of Dothan (<1 mile E. of Sardis Church)	031402010502	AL03140201-0502-110	31.20769	-85.54619						Post-	I	Good	Fair	
DBCC-2	Double Bridges Ck	Coffee	65G	74.0	Double Bridges Ck at Coffee Co Rd 655	031402011104	AL03140201-1104-100	31.21353	-85.95780								Fair		Fair
DOWG-3	Dowling Br	Geneva	65G	3.3	Dowling Branch at Geneva Co Rd 61	031402011004	AL03140201-1004-600	31.12847	-85.69624	48	Post-		AF						
ETMG-1	Eightmile Ck	Geneva	65G	63.8	Eightmile Creek at Geneva Co Rd 10	031402020803	AL03140202-0803-400	31.04886	-86.14538	52						I			

Table 2a. Description of stations sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers). Protection and restoration priorities, reference status, and indicators used to assess the site are also provided. Habitat and biological ratings are also provided.

Station	Stream	County	Eco	Area (mi^2)	Description	12 digit HUC	Assessment Unit	Latitude	Longitude	Protection/Restoration Priorities						Ref	Habitat	Biological Conditions	
										SHU	NPS	NWQI/ SWCD	CWP	Stake-holders	TMDL			Macroin-vertebrates	Fish
WCP-1A	Walnut Ck	Pike	65D	21.2	Walnut Ck just downstream of the Troy Walnut Ck WWTP effluent mixing zone	031402020401	AL03140202-0401-102	31.76652	-85.92567						Post-		Good	Poor	
Coosa																			
CHOC-2	Choccolocco Ck	Cleburne	45D	5.5	Choccolocco Ck at FS Rd 540, Talladega National Forest	031501060502	AL03150106-0504-102	33.82946	-85.58173					FWS		V	Good	Excellent-good	
o CHOC-3	Choccolocco Ck	Calhoun	67F	94.0	Choccolocco Ck at AL Hwy 9	031501060504	AL03150106-0504-102	33.73071	-85.67979				AF, ARC	FWS			Poor	Fair	
o CHOC-4	Choccolocco Ck	Calhoun	67F	143.9	Choccolocco Ck at US Hwy 431	031501060504	AL03150106-0504-101	33.62360	-85.72624				AF, ARC	FWS			Poor	Fair	
ESBT-2	Eastaboga Ck	Talladega	67F	25.6	Bridge in South Park, Talladega Super Speedway.	031501060513	AL03150106-0611-100	33.55535	-86.06264				U	CRK			Fair	Fair	
o HATC-2	Hatchet Ck	Coosa	45A	117.5	Hatchet Cr. at US Hwy 280	031501070706	AL03150107-0709-100	33.03639	-86.12333	29					Pre-	V	Good	Good-excellent	
MRYC-2	Marys Ck	Cleburne	45D	2.7	Marys Ck Talledega National Forest Rd 500	031501050901	AL03150105-0901-200	33.84931	-85.54229	38						V	Fair	Good	Excellent
SFTC-1	S Fk Terrapin Ck	Cleburne	45D	15.7	South Fk Terrapin Ck at Cleburne Co Rd 55 (Rabbittown Rd)	031501050901	AL03150105-0901-100	33.86016	-85.52444	38						V	Good	Good-fair	Excellent
o SHRT-1	Shirtee Ck	Talladega	67F	18.2	Shirtee Ck at Talladega Co Rd 24	031501070104	AL03150107-0104-100	33.21202	-86.27324						Pre-		Fair	Poor	
o TH-1	Tallaseehatchee Ck	Talladega	67F	122.8	Tallaseehatchee Ck at Talladega Co Rd 105 at bridge east of Childersburg	031501070106	AL03150107-0106-100	33.25534	-86.25967						Pre-		Fair	Poor	
UCHC-1	Unnamed tributary to Choccolocco Ck	Calhoun	67F	18.1	Unnamed trib to Choccolocco Ck at Recreation Dr	031501060505	AL03150106-0505-100	33.60649	-85.82515					CRK			Poor	Poor	
o WLBC-3	Unnamed Tributary to Tallaseehatchee Ck	Calhoun	67F	10.0	Unnamed trib toTallaseehatchee Ck at Farm Ln off of AL Hwy 204	031501060402	AL03150106-0402-200	33.82463	-85.78836								Poor	Poor	
o WEGC-1	Weogufka Ck	Coosa	45A	124.8	Weogufka Ck at submerged bridge below horse pasture	031501070603	AL03150107-0603-110	32.91046	-86.41979								Good	Good	
Escambia																			
o FYCE-1	Folley Ck	Escambia	65F	3.6	Folley Ck at Co Rd 53	031403040501	AL03140304-0501-200	31.12779	-86.79647	42	Post-					R	Poor	Fair	
LPAC-1	Little Patsaliga Ck	Crenshaw	65D	112.4	Little Patsaliga Ck at Swanner Bridge Rd	031403020303	AL03140302-0303-100	31.68579	-86.33511								Fair		
SSCE-1	Silas Ck	Escambia	65F	25.1	Silas Ck downstream of bridge at Co Rd 4	031403040502	AL03140304-0502-100	31.07934	-86.88759								Poor	Fair	
Escatawpa																			
o PPYM-1	Puppy Ck	Mobile	65F	42.3	Puppy Ck at Mobile Co Rd 21	031700080205	AL03170008-0205-101	30.98420	-88.40110						Post-		Poor	Good-excellent	
Mobile																			
o DOCB-1A	D'Olive Ck	Baldwin	65F	5.2	D'Olive Ck at 128 Lakeview Loop, approximately 0.25 mi upstream of DOCB-1	031602040505	AL03160204-0505-502	30.65210	-87.88960	58	Post-		ARC, U				Poor	Fair	
o DOCB-2	D'Olive Ck	Baldwin	65F	2.5	D'Olive Creek at US Hwy 90.	031602040505	AL03160204-0505-502	30.65552	-87.88389	58	Post-		ARC, U				Very Poor	Very Poor	
o HLB-1	Halls Ck	Baldwin	65F	19.6	Halls Ck at AL Hwy 59	031602040104	AL03160204-0104-100	31.05264	-87.83701						Post-	V	Fair	Good	
JOBB-2	Joes Br	Baldwin	75A	0.9	Joes Br at I-10 westbound off-ramp to US Hwy 90 (Exit # 35)	031602040505	AL03160204-0505-800	30.65702	-87.90905		Post-		ARC, U				Fair	Very poor-poor	
o PENB-1	Pensacola Br	Baldwin	65F	4.9	Pensacola Br at Baldwin Co Rd 48	031602050202	AL03160205-0202-410	30.52370	-87.81223				AF	NPS			Poor	Fair-poor	
SILB-1	Silver Ck	Baldwin	65F	3.3	Silver Ck at AL Hwy 104	031602050202	AL03160205-0202-310	30.54575	-87.73740				AF			R	Good	Poor	
o TWCB-1	Tiawasee Ck	Baldwin	65F	4.9	Tiawasee Ck at Bayview Dr	031602040505	AL03160204-0505-900	30.64277	-87.89184		Post-		ARC, U				Poor	Poor-fair	
Tallapoosa																			
o KNSR-10	Knokes Ck	Cleburne	45A	6.6	Knokes Ck at Cleburne Co Rd 10	031501080803	AL03150108-0803-200	33.52334	-85.40835				AF	NPS			Poor	Good-excellent	
KNSR-13	Knokes Ck	Randolph	45A	11.9	Knokes Ck at Randolph Co Rd 429	031501080803	AL03150108-0803-200	33.48416	-85.40231				AF				Fair	Good-fair	
o OAKC-1	Oakachoy Ck	Coosa	45A	16.6	Oakachoy Ck at Hwy 259	031501090701	AL03150109-0701-102	32.83413	-86.04025						Post-	V	Good	Good-fair	

Table 2a. Description of stations sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers). Protection and restoration priorities, reference status, and indicators used to assess the site are also provided. Habitat and biological ratings are also provided.

Station	Stream	County	Eco	Area (mi^2)	Description	12 digit HUC	Assessment Unit	Latitude	Longitude	Protection/Restoration Priorities						Ref	Habitat	Biological Conditions	
										SHU	NPS	NWQI/ SWCD	CWP	Stake-holders	TMDL			Macroin-vertebrates	Fish
Tennessee																			
O BERC-1	Bear Ck	Colbert	65J	722.0	Bear Creek at Natchez Trace Pkwy, Bear Ck mile 25.	060300060304	AL06030006-0304-102	34.66088	-88.09231	1							Fair		Good
O BERF-1	Bear Ck	Franklin	65J	241.0	Bear Ck at Franklin Co Rd 4	060300060105	AL06030006-0105-100	34.40916	-88.02441	1							Fair		Fair
O BERF-2	Bear Ck	Franklin	65J	263.0	Bear Ck at AL Hwy 24	060300060105	AL06030006-0105-100	34.44417	-88.11539	1							Fair		Fair
O CDRF-2	Cedar Ck	Franklin	65J	198.5	Cedar Ck at Co Rd 23	060300060204	AL06030006-0207-100	34.54271	-88.05698	1							Good		Excellent
CERF-1A	Cedar Ck	Franklin	65J	303.2	Cedar Ck at Franklin Co Rd 90.	060300060207	AL06030006-0207-100	34.55199	-88.09935	1						V	Fair		Good
CSPJ-69	Cole Spring Br	Jackson	71G	11.9	Cole Spring Br, downstream of Hwy 65, in the TNC Roy B. Whitaker Paint Rock R Preserve.	060300020201	AL06030002-0203-401	34.67380	-86.32250	9	Post-						Fair	Fair	
CSPJ-70	Cole Spring Br	Jackson	71G	9.9	Cole Spring Br at AL Hwy 65	060300020203	AL06030002-0203-402	34.68280	-86.32970	9	Post-						Poor	Poor	
HARF-1	Harris Ck	Franklin	71G	9.9	Harris Ck at Herrington Cr Rd above confluence with Payne Ck	060300060201	AL06030006-0201-900	34.46917	-87.72389	1	Post-		ARC				Fair	Poor-fair	
INCL-1	Indiancamp Ck	Lauderdale	71F	8.4	Indiancamp Ck upstream of Lauderdale Co Rd 135 at Indian Camp Festival Pk	060300050509	AL06030005-0509-800	34.92220	-87.62080		Post-					V	Good	Good-fair	Excellent
O LBRF-4	Little Bear Ck	Franklin	65I	78.2	Little Bear Ck at Franklin Co Rd 23	060300060206	AL06030006-0206-101	34.48833	-88.03556	1							Fair	Fair	Good
MACM-1	Mack Ck	Morgan	71G	7.8	Mack Ck at private property near confluence with Flint Ck	060300021007	AL06030002-1007-500	34.38926	-86.96412		Post-						Poor	Poor	Fair
O PRRJ-1	Paint Rock R	Jackson	71G	320.9	Paint Rock R at US Hwy 72	060300020203	AL06030002-0204-100	34.62417	-86.30639	9									
RCKC-1	Rock Ck	Colbert	65J	53.6	Rock Ck at Natchez Trace Rd	060300060304	AL06030006-0304-500	34.65790	-88.09412	1							Fair		Excellent
O SHLL-1	Shoal Ck	Lauderdale	71F	433.4	Shoal Ck at Lauderdale Co Rd 8	060300050509	AL06030005-0509-102	34.95333	-87.59444							V	Good	Fair-poor	Excellent
VILM-350	Village Br	Morgan	71J	9.2	Village Br at unnamed Co Rd	060300021014	AL06030002-1014-702	34.47630	-86.94070		Post-		AF				Poor	Poor-fair	
Yellow																			
PONC-1	Pond Ck	Covington	65G	5.8	Pond Ck at Blue Springs WMA Rd 45	031401030203	AL03140103-0203-200	31.09315	-86.51805	45						V	Fair	Good	

AF: Agricultural and Forestry Concerns
ARC: Aquatic Resource Concerns
Br: Branch; Ck: Creek; R: River
Co Rd: County Road
CWP: Clean Water Partnership
Eco: EPA Level IV Ecoregions
I: Incomplete dataset
NPS: Nonpoint Source Program
O. Monitoring conducted using non-CWA §319 funding.
Post: Post-BMP (Best Management Practices)
R: Rejected
SHU: US Fish and Wildlife Service Strategic Habitat Unit (http://alh2o.org/shus/)
U: Urban Concerns
V: Verified

Table 2b. The 2022 assessment unit, use class, and 2018, 2020 and 2022 assessment unit category for each station sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers).

Station	Basin	County	12-digit HUC	Waterbody	Assessment Unit	Use Class	Size (RM)	Downstream	Upstream	AU Categories		
										2018	2020	2022
BCH-1	Alabama	Dallas	031502030110	Brushy Ck	AL03150203-0110-100	F&W	53.6	Dannelly L	Its source	5	5	5
BCH-2	Alabama	Dallas	031502030109	Bogue Chitto Ck	AL03150203-0110-100	F&W	53.6	Dannelly L	Its source	5	5	5
BGUD-3	Alabama	Dallas	03150203010	Bogue Chitto Ck	AL03150203-0110-100	F&W	53.6	Dannelly L	Its source	5	5	5
DRCD-1	Alabama	Dallas, Lowndes	031502030106	Dry Cedar Ck	AL03150203-0206-100	F&W	28.3	Cedar Ck	Its source	2B	2A	2A
LMBA-1	Alabama	Autauga, Chilton	031502010902	Little Mulberry Ck	AL03150201-0903-100	F&W	38.5	Alabama River	Its source	2B	1	1
LRDC-1	Alabama	Clarke	03150204060	Little Reedy Ck	AL03150204-0603-300	F&W	7.5	Sizemore Ck	Its source	2B	1	1
MAJB-1	Alabama	Baldwin	03150204070	Majors Ck	AL03150204-0704-100	F&W	19.3	Alabama River	Its source	2A	2A	2A
BSAT-1	Black Warrior	Tuscaloosa	031601130105	Big Sandy Ck	AL03160113-0105-100	F&W	37.4	Black Warrior River	Its source	2B	2B	2B
BSAT-59A	Black Warrior	Bibb, Tuscaloosa	031601130102	Bear Ck	AL03160113-0102-100	F&W	11.3	Big Sandy Ck	its source		1	1
BRSL-3	Black Warrior	Lawrence, Winston	031601100201	Brushy Ck	AL03160110-0203-103	F&W	29.9	US Highway 278	Its source	1	1	1
CLEM-1	Black Warrior	Marshall	031601110103	Clear Ck	AL03160111-0103-100	F&W	16.4	Locust Fk	Its source	2B	1	1
FIMH-40C	Black Warrior	Hale	031601130402	Fivemile Ck	AL03160113-0402-100	F&W	32.2	Warrior L	Payne L Dam	2B	1	1
INMW-1	Black Warrior	Winston	031601100203	Inman Ck	AL03160110-0203-110	F&W	5.8	Brushy Ck	Its source	1	5	5
MLCT-4	Black Warrior	Tuscaloosa	031601130201	Mill Ck	AL03160113-0201-100	F&W	10.4	Warrior L	Its source	5	5	5
PANC-2	Black Warrior	Cullman	031601090109	Pan Ck	AL03160109-0109-900	F&W	10.7	Mulberry Fk	Its source	2B	2B	2B
SF-1	Black Warrior	Lawrence, Winston	031601100103	Sipsey Fork	AL03160110-0104-103	F&W	21.2	Sandy Ck	Its source	1	1	1
SPRW-53	Black Warrior	Walker	031601090306	Spring	AL03160109-0306-100	F&W	7.9	Blackwater Ck	Its source	2B	5	5
SSB-2	Black Warrior	Bibb, Hale, Tuscaloosa	031601130103	South Sandy Ck	AL03160113-0103-100	F&W	14.9	Big Sandy Ck	Its source	1	1	1
TTHT-1	Black Warrior	Tuscaloosa	031601130202	Tater Hill Ck	AL03160113-0202-300	F&W	4.6	Warrior L	Its source	3	2A	2A
BRE-1	Blackwater	Covington, Escambia	031401040103	Bear Ck	AL03140104-0103-100	F&W	10.7	Panther Ck	Its source	1	1	1
BUCS-50	Cahaba	Shelby	03150202020	Buck Ck	AL03150202-0203-103	F&W	8.4	Shelby Co Rd 44	Its source	2B	1	1
TOWR-1	Chattahoochee	Randolph	031300020602	Town Ck	AL03130002-0602-100	F&W	2.1	Alabama-Georgia state line	its source		3	3
COPH-2	Chipola	Houston	31300120201	Cooper Ck	AL03130012-0201-410	F&W	3.1	Cowarts Ck	Its source	3	5	5
BRH-1	Choctawhatchee	Houston	031402010502	Bear Ck	AL03140201-0502-110	F&W	11.4	Little Choctawhatchee R	Its source	1	2B	2B

Table 2b. The 2022 assessment unit, use class, and 2018, 2020 and 2022 assessment unit category for each station sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers).

Station	Basin	County	12-digit HUC	Waterbody	Assessment Unit	Use Class	Size (RM)	Downstream	Upstream	AU Categories		
										2018	2020	2022
DBCC-2	Choctawhatchee	Coffee	031402011104	Double Bridges Ck	AL03140201-1104-100	F&W	15.1	Coffee Co Road 655	Its source	2A	5	5
DOWG-3	Choctawhatchee	Geneva	031402011004	Dowling Branch	AL03140201-1004-600	F&W	2.1	Cox Mill Ck	Its Source	5	5	5
ETMG-1	Choctawhatchee	Geneva	031402020803	Eightmile Ck	AL03140202-0803-400	F&W	8.6	Flat Ck	Alabama-Florida state line	2A	2B	2B
WCP-1A	Choctawhatchee	Pike	031402020401	Walnut Ck	AL03140202-0401-102	F&W	3.3	Pike Co Rd 3304	US Hwy 231	4A	4A	4A
CHOC-2	Coosa	Calhoun, Cleburne	031501060502	Choccolocco Ck	AL03150106-0504-102	F&W	30.0	Egoniaga Ck	Its source	1	5	5
CHOC-3	Coosa	Calhoun	031501060504	Choccolocco Ck	AL03150106-0504-102	F&W	30.0	Egoniaga Ck	Its source	1	5	5
CHOC-4	Coosa	Calhoun	031501060504	Choccolocco Ck	AL03150106-0504-101	PWS/ F&W	8.2	Hillabebee Ck	Egoniaga Ck	1	5	5
ESBT-2	Coosa	Calhoun, Talladega	031501060513	Eastaboga Ck	AL03150106-0611-100	F&W	6.9	Choccolocco Ck	Its source	3	5	5
HATC-2	Coosa	Coosa	031501070706	Hatchet Ck	AL03150107-0709-100	OAW /S/ F&W	35.5	Mitchell L	Wildcat Ck	1	5	5
MRYC-2	Coosa	Cleburne	031501050901	Marys Ck	AL03150105-0901-200	F&W	5.9	South Fork Terrapin Ck	Its source		5	5
SFTC-1	Coosa	Cleburne	031501050901	South Fork Terrapin Ck	AL03150105-0901-100	F&W	11.4	Terrapin Ck	Its source	1	1	1
SHRT-1	Coosa	Talladega	031501070103	Shirtee Ck	AL03150107-0104-100	F&W	4.7	Tallaseehatchee Ck	Its source	5	5	5
TH-1	Coosa	Talladega	031501070106	Tallaseehatchee Ck	AL03150107-0106-100	F&W	16.7	Lay L	Howard Dam	5	5	5
UCHC-1	Coosa	Calhoun	031501060505	Choccolocco Ck	AL03150106-0505-100	F&W	5.6	Choccolocco Ck	its source		5	5
WEGC-1	Coosa	Coosa	031501070603	Weogufka Ck	AL03150107-0603-110	S/ F&W	45.2	Mitchell L	Its source	1	5	5
WLBC-3	Coosa	Calhoun	031501060402	Unnamed Tributary to Tallaseehatchee Ck	AL03150106-0402-200	F&W	6.0	Tallaseehatchee Ck	Its source	3	2A	2A
FYCE-1	Escambia	Escambia	031403040505	Folley Ck	AL03140304-0501-200	F&W	3.7	Conecuh River	Its source	2A	2A	2A
LPAC-1	Escambia	Crenshaw	031403020303	Little Patsaliga Ck	AL03140302-0303-100	S/ F&W	32.0	Patsaliga Ck	Its source	2B	5	5
SSCE-1	Escambia	Escambia	031403040505	Silas Ck	AL03140304-0502-100	F&W	1.6	Conecuh River	Its source	2B	2B	2B
PPYM-1	Escatawpa	Mobile	031700080205	Puppy Ck	AL03170008-0205-101	F&W	5.7	Escatawpa River	Alabama Highway 217	1	5	5
DOCB-1A	Mobile	Baldwin	031602040505	D'Olive Ck	AL03160204-0505-502	F&W	4.6	L Forest dam	Its source	5	5	5

Table 2b. The 2022 assessment unit, use class, and 2018, 2020 and 2022 assessment unit category for each station sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers).

Station	Basin	County	12-digit HUC	Waterbody	Assessment Unit	Use Class	Size (RM)	Downstream	Upstream	AU Categories		
										2018	2020	2022
DOCB-2	Mobile	Baldwin	031602040505	D'Olive Ck	AL03160204-0505-502	F&W	4.6	L Forest dam	Its source	5	5	5
HLB-1	Mobile	Baldwin	03160204010	Halls Ck	AL03160204-0104-100	F&W	11.9	Tensaw L	Its source	1	5	5
JOBB-2	Mobile	Baldwin	03160204050	Joes Branch	AL03160204-0505-800	F&W	1.6	D'Olive Ck	Its source	5	1	1
PENB-1	Mobile	Mobile	03160205020	Eslava Ck	AL03160205-0202-410	F&W	4.3	Fish River	Its source	3	3	3
SILB-1	Mobile	Baldwin, Mobile	031602050202	Silver Ck	AL03160205-0202-310	F&W	4.1	Polecat Ck	Its source		5	5
TWCB-1	Mobile	Baldwin	03160204050	Tiawasee Ck	AL03160204-0505-900	F&W	3.5	D'Olive Ck	Its source	5	5	5
KNSR-10	Tallapoosa	Cleburne, Randolph	031501080803	Knokes Ck	AL03150108-0803-200	F&W	12.6	Little Tallapoosa River	Its source	3	5	5
KNSR-13	Tallapoosa	Cleburne, Randolph	031501080803	Knokes Ck	AL03150108-0803-200	F&W	12.6	Little Tallapoosa River	Its source	3	5	5
OAKC-1	Tallapoosa	Coosa	03150109070	Oakachoy Ck	AL03150109-0701-102	F&W	6.1	L Martin	Its source	1	1	1
BERC-1	Tennessee	Colbert	060300060304	Bear Ck	AL06030006-0304-102	F&W	10.1	US Hwy 72	Alabama-Mississippi state line	5	5	5
BERF-1	Tennessee	Franklin	060300060105	Bear Ck	AL06030006-0105-100	F&W	18.6	Alabama-Mississippi state line	Bear Ck L Dam	3	1	1
BERF-2	Tennessee	Franklin	060300060105	Bear Ck	AL06030006-0105-100	F&W	18.6	Alabama-Mississippi state line	Bear Ck L Dam	3	1	1
CDRF-2	Tennessee	Franklin	060300060204	Cedar Ck	AL06030006-0207-100	F&W	18.8	Alabama-Mississippi state line	Cedar Ck L Dam	2B	1	1
CERF-1A	Tennessee	Colbert, Franklin	060300060207	Cedar Ck	AL06030006-0207-100	F&W	18.8	Alabama-Mississippi state line	Cedar Ck L Dam	2B	1	1
CSPJ-69	Tennessee	Jackson	060300020201	Cole Spring Branch	AL06030002-0203-401	F&W	1.0	Paint Rock River	Bridge at Jones farm	2B	5	5
CSPJ-70	Tennessee	Jackson	060300020203	Cole Spring Branch	AL06030002-0203-402	F&W	1.8	Bridge at Jones farm	Jeep trail crossing	4A	5	5
HARF-1	Tennessee	Franklin	06030006020	Harris Ck	AL06030006-0201-900	F&W	6.0	Mud Ck	Its source	5	5	5
INCL-1	Tennessee	Lauderdale	06030005050	Indiancamp Ck	AL06030005-0509-800	F&W	6.0	Shoal Ck	Its source	1	5	5
LBRF-4	Tennessee	Franklin	060300060206	Little Bear Ck	AL06030006-0206-101	S/F&W	11.9	Cedar Ck	Little Bear Ck Dam	2B	5	5
MACM-1	Tennessee	Morgan	06030002100	Mack Ck	AL06030002-1007-500	F&W	5.9	Flint Ck	Its source	4A	4A	4A
NOBM-1008	Tennessee	Morgan	060300021008	No Business Ck	AL06030002-1008-101	F&W	7.3	Flint Ck	Johnson Chapel Ck	4A	4A	4A
PRRJ-1	Tennessee	Jackson, Madison, Marshall	060300020203	Paint Rock River	AL06030002-0204-110	F&W	26.6	Tennessee River (Wheeler L)	Cole Spring Br	2A	1	1
PYCF-1	Tennessee	Franklin	06030006020	Payne Ck	AL06030006-0201-300	F&W	1.6	Mud Ck	Sloss L		5	5

Table 2b. The 2022 assessment unit, use class, and 2018, 2020 and 2022 assessment unit category for each station sampled as part of the 2017 CWA §319 grant, project #2 (streams and rivers).

Station	Basin	County	12-digit HUC	Waterbody	Assessment Unit	Use Class	Size (RM)	Downstream	Upstream	AU Categories		
										2018	2020	2022
RCKC-1	Tennessee	Colbert	060300060309	Rock Ck	AL06030006-0304-500	F&W	20.7	Bear Ck	Its source	5	5	5
SHLL-1	Tennessee	Lauderdale	060300050509	Shoal Ck	AL06030005-0509-102	F&W	10.8	Indiancamp Ck	Alabama-Tennessee state line	3	1	1
VILM-350	Tennessee	Morgan	060300021014	Village Br	AL06030002-1014-702	F&W	6.5	Moss Spring Br	Its source	4A	4A	4A
NXBS-50	Tombigbee	Sumter	031601081101	Noxubee R	AL03160108-1102-100	F&W	24.0	Tombigbee River	Alabama-Mississippi state line	5	5	5
SUCS-1	Tombigbee	Sumter	031602020404	Sucarnoochee R	AL03160202-0404-101	PWS/S/F&W	6.1	US Highway 11	Miuka Ck	2A	5	5

Table 3. The causes, sources and justification for listing waters as impaired using data collected as part of the 2017 CWA §319 grant, project #2 (streams and rivers).

Station	Waterbody	County	12-digit HUC	Assessment Unit	Use Class	Year Listed	Size (mi)	Downstream	Upstream	Pollutant	Source	Justification
Alabama												
SWFC-1	Swift Ck	Autauga, Chilton	031502010601	AL03150201-0601-100	S/ F&W	2020	10.6	Autauga County Road 24	Its source	Pathogens (E.Coli)	Pasture Grazing	Records from 2017 at ADEM station SWFC-1 show that the E. coli criterion was exceeded in 4 out of 8 samples.
Black Warrior												
INMW-1	Inman Ck	Winston	031601100203	AL03160110-0203-110	F&W	2020	5.8	Brushy Ck	Its source	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station INMW-1 from 2017 show that the E.coli criterion was exceeded in 2 out of 8 samples.
SPRW-53	Spring Ck	Walker	031601090306	AL03160109-0306-100	F&W	2020	7.9	Blackwater Ck	Its source	Total dissolved solids	Surface Mining, Surface Mining-Abandoned	A macroinvertebrate assessment at ADEM station SPRW-53 on 4/25/2017 had a poor WMB-I score. Total dissolved solids values measured at this site were consistently higher than the 90th percentile of 68 ecoregional reference values
Chipola												
COPH-2	Cooper Ck	Houston	031300120201	AL03130012-0201-410	F&W	2020	3.1	Cowarts Ck	Its source	Nutrients	Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM station COPH-2 from 2017 show dissolved oxygen concentrations ranging from 0.0 mg/L to 7.2 mg/L. The median pH value during this period of record was 7.1 s.u. and the maximum value was 7.3 s.u. During this time, the median Total Nitrogen concentration was 7.8 mg/L with a maximum concentration of 17.97 mg/L. The median Total Phosphorus concentration was 1.02 mg/L with a maximum value of 2.12 mg/L. In addition, a maximum chlorophyll a value of 29.10 ug/L was record.
COPH-2	Cooper Ck	Houston	031300120201	AL03130012-0201-410	F&W	2020	3.1	Cowarts Ck	Its source	Organic Enrichment (CBOD, NBOD)	Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM station COPH-2 from 2017 show that the dissolved oxygen criterion was exceeded in 7 out of 8 samples.
COPH-2	Cooper Ck	Houston	031300120201	AL03130012-0201-410	F&W	2020	3.1	Cowarts Ck	Its source	Pathogens (E.Coli)	Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM station COPH-2 from 2017 show that the E. coli single sample criterion was exceeded in 6 out of 8 samples.
Choctawhatchee												
DBCC-2	Double Bridges Ck	Coffee	031402011104	AL03140201-1104-100	F&W	2020	15.1	Coffee County Road 655	Its source	Pathogens (E.Coli)	Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM stationDBCC-2 from 2014 and 2017 show that the E. coli single sample criterion was exceeded in 6 out of 16 samples
Coosa												
CHOC-2	Choccolocco Ck	Calhoun, Cleburne	031501060502	AL03150106-0504-102	F&W	2020	30.0	Egoniaga Ck	Its source	Pathogens (E.Coli)	Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM station CHOC-3 from 2017 show that the E. coli criterion was exceeded in 4 out of 8 samples. The E. coli geomean criterion was also exceeded in 2017.
CHOC-3	Choccolocco Ck	Calhoun	031501060504	AL03150106-0504-102	F&W	2020	30.0	Egoniaga Ck	Its source	Pathogens (E.Coli)	Animal Feeding Operations, Pasture Grazing	Records at ADEM station CHOC-3 from 2017 show that the single sample criterion was exceeded in 4 out of 18 samples. The E. coli geomena criterion was also exceeded in 2017.
CHOC-4	Choccolocco Ck	Calhoun	031501060504	AL03150106-0504-101	PWS/ F&W	2020	30.0	Hillabebee Ck	Egoniaga Ck	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station CHOC-4 from 2017 show that the single sample criterion was exceeded in 3 out of 18 samples. The E. coli geomena criterion was also exceeded in 2017.
ESBT-2	Eastaboga Ck	Calhoun, Talladega	031501060513	AL03150106-0611-100	F&W	2020	6.9	Choccolocco Ck	Its source	Pathogens (E.Coli)	Collection System Failure, Pasture Grazing, Urban Runoff/Storm Sewers	Records at ADEM station ESBT-1 from 2017 show that the E. coli criterion was exceeded in 4 out of 8 samples
MRYC-2	Marys Ck	Cleburne	031501050901	AL03150105-0901-200	F&W	2020	5.9	South Fork Terrapin Ck	its source	Pathogens (E.Coli)	Pasture Grazing, Pasture Grazing	Records at ADEM station MRYC-2 from 2017 show that the E. coli criterion was exceeded in 3 out of 9 samples.
UCHC-1	Choccolocco Ck	Calhoun	031501060505	AL03150106-0505-100	F&W	2020	5.6	Choccolocco Ck	its source	Pathogens (E.Coli)	Collection System Failure, Urban Runoff/Storm Sewers	Records at ADEM station UCHC-1 from 2017 show that the E. coli criterion was exceeded in 7 out of 23 samples. The E. coli geomean criterion was also exceeded twice in 2017.
WEGC-1	Weogufka Ck	Coosa	031501070603	AL03150107-0603-110	S/F&W	2020	45.2	Mitchell Lake	Its source	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station WEGC-1 from 2017 show that the E. coli single sample criterion was exceeded in 4 out of 8 samples.
Escambia												
LPAC-1	Little Patsaliga Ck	Crenshaw	031403020303	AL03140302-0303-100	S/ F&W	2020	32.0	Patsaliga Ck	Its source	Pathogens (E.Coli)	Collection System Failure, Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM station LPAC-1 from 2014 and 2017 show that the E. coli single sample criterion was exceeded in 4 out of 15 samples.
Mobile												
HLB-1	Halls Ck	Baldwin	031602040104	AL03160204-0104-100	F&W	2020	11.9	Tensaw Lake	Its source	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station HLB-1 from 2016-2017 show that the E. coli criterion was exceeded in 4 out of 16 samples.
SILB-1	Silver Ck	Baldwin, Mobile	031602050202	AL03160205-0202-310	F&W	2020	4.1	Polecat Ck	Its source	Pathogens (E.Coli)	Collection System Failure, Pasture Grazing, Urban Runoff/Storm Sewers	Records at ADEM station SILB-1 from 2017 show that the E. coli criterion was exceeded in 2 out of 8 samples.
Tallapoosa												
KNSR-10	Knokes Ck	Cleburne, Randolph	031501080803	AL03150108-0803-200	F&W	2020	12.6	Little Tallapoosa R	Its source	Pathogens (E.Coli)	Intensive Animal Feeding Operations, Pasture Grazing	Records from 2017 at ADEM station KNSR-10 show that the E.coli criterion was exceeded in 13 out of 16 samples and 2 pH violations out of 17

Table 3. The causes, sources and justification for listing waters as impaired using data collected as part of the 2017 CWA §319 grant, project #2 (streams and rivers).

Station	Waterbody	County	12-digit HUC	Assessment Unit	Use Class	Year Listed	Size (mi)	Downstream	Upstream	Pollutant	Source	Justification
KNSR-13	Knokes Ck	Cleburne, Randolph	031501080803	AL03150108-0803-200	F&W	2020	12.6	Little Tallapoosa R	Its source	Pathogens (E.Coli)	Intensive Animal Feeding Operations, Pasture Grazing	Records from 2017 at ADEM station KNSR-13 in 11 out of 16 samples and 4 pH violations out of 19.
Tennessee												
CSPJ-69	Cole Spring Br	Jackson	060300020201	AL06030002-0203-401	F&W	2020	1.0	Paint Rock R	Bridge at Jones farm	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station CSPJ-69 from 2013 and 2017 show that the E. coli criterion was exceeded in 4 out of 9 samples.
CSPJ-70	Cole Spring Br	Jackson	060300020203	AL06030002-0203-402	F&W	2020	1.8	Bridge at Jones farm	Jeep trail crossing	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station CSPJ-69 from 2013 and 2017 show that the E. coli criterion was exceeded in 4 out of 9 samples.
INCL-1	Indiancamp Ck	Lauderdale	060300050509	AL06030005-0509-800	F&W	2020	6.0	Shoal Ck	Its source	Pathogens (E.Coli)	On-Site Wastewater Systems (Septic Tanks, etc.), Pasture Grazing	Records at ADEM station INCL-1 from 2013 and 2016-2017 show that the E. coli criterion was exceeded in 8 out of 20 samples.
LBRF-4	Little Bear Ck	Franklin	060300060206	AL06030006-0206-101	S/ F&W	2020	11.9	Cedar Ck	Little Bear Creek Dam	Pathogens (E.Coli)	Intensive Animal Feeding Operations, Pasture Grazing	Records at ADEM station LBRF-4 from 2017 show that the E. coli criterion was exceeded in 2 out of 8 samples.
PRRJ-21	Paint Rock R	Jackson	060300020107	AL06030002-0203-100	F&W	2020	27.1	Cole Spring Br	Its source	Pathogens (E.Coli)	Pasture Grazing	Records from 2017 at ADEM station PRRJ-4 show that the E. coli criterion was exceeded in 3 out of 8 samples and at ADEM station PRRJ-21 in 3 out of 8 samples.
Tombigbee												
SUCS-1	Sucarnoochee R	Sumter	031602020404	AL03160202-0404-101	PWS/S/ F&W	2020	6.1	US Highway 11	Miuka Creek	Pathogens (E.Coli)	Pasture Grazing	Records at ADEM station SUCS-1 from 2013-2018 show that the E. coli criterion was exceeded in 4 out of 17.

Br: Branch; Ck: Creek; R: River

Table 4. Waterbodies where the 2017 biological surveys indicated the aquatic communities to be in high quality condition.

Station	Stream	County	ECO	Area (mi^2)	HUC	Assessment Unit	Use Class	2020 Cat	Lat	Long	SHU	Ref	Habitat	Biological Conditions		Biological survey rating justification
														Macro-inverte-brates	Fish	
Alabama																
LMBA-1	Little Mulberry Ck	Autauga	65I	70.9	031502010902	AL03150201-0903-100	F&W	1	32.58247	-86.77757		V	Good	Good		Little Mulberry Ck is classified as a *F&W* stream, located within Autauga County, and the Fall Line Hills (65I) Ecoregion. Based on data collected in 2017, the waterbody was assessed as fully supporting its F&W use classification. The 2011 NLCD indicates the watershed of Little Mulberry Ck to be 55% forested, with some shrub/scrub and pasture/hay, and no permitted outfalls. Results of the 2017 surveys indicated habitat quality and availability, and the macroinvertebrate community to be in *good* condition. Water quality analyses resulted in zero exceedances of its *F&W* use classification criteria and standards, and indicated chemical conditions similar to reference reaches previously established in ecoregion 65I. Based on the 2017 results of physical and biological surveys, and water quality analyses, Little Mulberry Ck at LMBA-1 was verified as a reference reach for ecoregion 65I.
LRDC-1	Little Reedy Ck	Clarke	65F	10.5	031502040603	AL03150204-0603-300	F&W	1	31.43208	-87.74533		V	Good	Excellent		Little Reedy Ck is classified as a *F&W* stream, located within Clarke County, and the Southern Pine Plains and Hills (65F) Ecoregion. Based on data collected in 2017, the waterbody was assessed as fully supporting its *F&W* use classification. The 2011 NLCD indicates the watershed of Little Reedy Ck to be 64% forested, with some shrub/scrub. As of Jan 1, 2017, two construction/stormwater outfalls were permitted within the watershed. The 2017 habitat survey rated habitat quality and availability as *good* for supporting aquatic communities. Median conductivity and hardness were higher than background, based on established ecoregional reference reach data; and stream pH exceeded the *F&W* criterion during August. However, the condition of the macroinvertebrate community was rated as *excellent*, identifying Little Reedy Ck at LRDC-1 as a level 2, or near natural, site. Sixty-seven total taxa were collected, including 27 (40%) pollution-sensitive taxa. Ten taxa are only found in the most pristine streams throughout Alabama and the southeast. Based on the 2017 results of physical and biological surveys, and water quality analyses, Little Reedy Ck at LRDC-1 was verified as a reference reach for ecoregion 65F. However, monitoring should be continued to ensure that water quality conditions return to normal and/or they do not impact the biological communities.
MAJB-1	Majors Ck	Baldwin	65F	44.6	031502040704	AL03150204-0704-100	F&W	2A	31.12892	-87.81803			Fair	Good		A tributary of the Alabama R, Majors Ck is a *F&W* stream located in Baldwin County. The 2011 NLCD shows the Majors Ck watershed to be 47% forested and 26% shrub/scrub. E. coli pathogen samples collected in Jun, Sep, and Oct exceeded single sample criteria for a *F&W* stream. However, Majors Ck at MAJB-1 was not fully assessed based on the 2017 data. While the condition of the macroinvertebrate community was rated as *good*, with 57 total taxa, and 19 pollution-sensitive taxa, concentrations of lead and copper exceeded aquatic life use (ALU) criteria. Lead concentrations exceeded the chronic ALU criterion during two high flow events. The copper concentration exceeded chronic and acute ALU criteria during the high flow event in Sep. In addition to high flows, ALU criteria for both lead and copper are hardness-adjusted, and are most stringent at the very low hardness conditions present at the site. Additional monitoring is recommended to ensure that biological conditions remain stable.
Black Warrior																
BRSL-3	Brushy Ck	Lawrence	68E	8.9	031601100201	AL03160110-0203-103	F&W	1	34.33070	-87.28620	22	S	Good	Good-excellent	Good	Located within Bankhead National Forest, Brushy Ck watershed is well-protected from disturbance. Results of the fish IBI survey indicate the community to be in good condition, with a surprising number of species collected for a small watershed. Results of the 2017 macroinvertebrate survey indicate the community to be in good-excellent condition. Eighty-five total taxa were collected. Nearly half of the taxa collected were highly sensitive (10) or (39) sensitive to pollution.

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Station	Stream	County	ECO	Area (mi^2)	HUC	Assessment Unit	Use Class	2020 Cat	Lat	Long	SHU	Ref	Habitat	Biological Conditions		Biological survey rating justification
														Macro-inverte-brates	Fish	
INMW-1	Inman Ck	Winston	68E	5.3	031601100203	AL03160110-0203-110	F&W	5	34.21590	-87.22400	22		Good	Excellent-good		Inman Ck is a *F&W* stream located within located in Bankhead National Forest, and the U. Sipsey Fk SHU, established by the USFWS and ARSN, as a high-quality habitat occupied by federally listed and state-imperiled spp. The Inman Ck watershed is 81% forested, with some pasture/hay areas, with no permitted outfalls and few roads. The 2017 macroinvertebrate survey indicated the community in Inman Ck at INMW-1 to be in excellent-good condition, with 95 total taxa. Ten of the total taxa are classified as rare and highly sensitive; 31 more commonly found taxa are also classified as sensitive. Sensitive and highly sensitive organisms comprised 30% of the total taxa collected. Biological conditions at the site have remained excellent since the ADEM began sampling the reach in 1993.
SSB-2	S Sandy Ck	Bibb	65I	1.3	031601130103	AL03160113-0103-100	F&W	1	32.94268	-87.37584		V	Fair	Good		South Sandy Creek at SSB-2 is a small perennial *F&W* headwater stream that drains 1.3 sq mi of the Talladega National Forest in Bibb County in the Black Warrior River basin. The watershed is 94% forested (2011 NLCD), with no permitted outfalls, and only two small road crossings slightly upstream of the sampling location. Results of the biological survey indicate the community to be in good condition, with 41 total taxa collected, including 7 rare, highly sensitive taxa and 6 Plecopteran taxa. Fourteen EPT taxa were collected, 9 of which are categorized as sensitive or highly sensitive to pollution. Forty six percent of the taxa collected were sensitive or highly sensitive to pollution.
SF-1	Sipsey Fk	Winston	68E	89.2	031601100103	AL03160110-0104-103	F&W	1	34.28558	-87.39906	22	S	Good	Good-fair	Good	Sipsey Fork at Winston County Road 60 is located within the Bankhead National Forest. Considered a minimally disturbed area, it is recognized as a Wilderness Area by the United States Forest Service. Macroinvertebrate survey results indicate the macroinvertebrate community to be in good-fair condition, with 63 total taxa, including 18 pollution-sensitive taxa and 7 highly sensitive taxa. Fish taxa richness was also high, with 20 species collected during the 2017 fish survey. Although most of the species observed were darters and shiners associated with clean water quality, the percentage of sand substrate and presence of a heavy bedload has increased over the last several years.
Blackwater																
BRE-1	Bear Ck	Escambia	65F	28.2	031401040103	AL03140104-0103-100	F&W	1	31.03334	-86.70961		S	Fair	Good-excellent		Bear Creek is a Fish & Wildlife (F&W) stream located within the Conecuh National Forest in the Blackwater River basin. According to the 2011 National Land Cover Dataset, the watershed is 85% forested. This watershed is sparsely populated, and contains no permitted outfalls. The watershed has a very low road density, with only one small dirt road crossing approximately fives miles upstream of BRE-1. The condition of the macroinvertebrate community has been rated as excellent-good, with 60 total taxa. Seven of the total taxa are classified as rare and highly sensitive; twelve more commonly found taxa are also classified as sensitive.
Coosa																
CHOC-2	Choccolocco Ck	Cleburne	45D	5.5	031501060502	AL03150106-0504-102	F&W	5	33.82946	-85.58173		V	Good	Excellent-good		Located within the Cheaha State Park, the Choccolocco Ck watershed is of exceptional quality, 98% forested, and containing no permitted outfalls. Several recreational hiking trails run through the area. Water quality conditions are very high. There is only one road crossing upstream, which is a small dirt road approximately five miles upstream. The condition of the macroinvertebrate community has been rated as excellent-good, identifying Choccolocco Creek at CHOC-2 as a level 2 site or near natural site. Taxa richness and diversity are excellent, with 104 total taxa collected at the site, among the highest ever collected by ADEM. Fifteen of the taxa are only found in the most pristine streams throughout Alabama and the southeast.

Table 4. Waterbodies where the 2017 biological surveys indicated the aquatic communities to be in high quality condition.

Station	Stream	County	ECO	Area (mi^2)	HUC	Assessment Unit	Use Class	2020 Cat	Lat	Long	SHU	Ref	Habitat	Biological Conditions		Biological survey rating justification
														Macro-inverte-brates	Fish	
HATC-2	Hatchet Ck	Coosa	45A	117.5	031501070706	AL03150107-0709-100	OAW/S/F&W	5	33.03639	-86.12333	29	V	Good	Good-excellent		Hatchet Ck is classified as *OAW/S/F&W* stream located in the Coosa R Basin. Its *OAW* classification recognizes Hatchet Ck's ecological and recreational significance to Alabama. As a SHU, the watershed maintains a geomorphically stable channel and a natural flow regime that support the behavior, growth, and survival of four federally listed endangered and threatened species, and seven species listed to be of the Highest or High Conservation Concern by the State of Alabama. The Hatchet Ck watershed at HATC-2 is 74% forested, with some shrub/scrub, pasture/hay, and urban areas. The condition of the macroinvertebrate community was rated as good-excellent, with 85 total taxa. Eight highly sensitive, rare taxa were collected, and comprised 22% of total organisms collected. Twenty-three more commonly found sensitive taxa were collected. Together, sensitive and highly sensitive taxa comprised 36% of total taxa collected. Twenty-three sensitive and highly sensitive EPT taxa were collected, and comprised 27% of total taxa.
MRYC-2	Marys Ck	Cleburne	45D	2.7	031501050901	AL03150105-0901-200	F&W	5	33.84931	-85.54229	38	S	Fair	Good	Excellent	Located and protected within the Talladega National Forest, Marys Ck at MRYC-2 is part of the South Fork of the Terrapin Ck, known to have exceptional fish diversity in the Coosa River basin. With a watershed of just 2.7 square miles, 22 species of fish were collected. Results of the macroinvertebrate survey indicate the community to be in good condition. Seventy-seven taxa were collected, including 21 EPT, and 29 highly sensitive and sensitive taxa. Becks index scored 16, further indicating the presence of highly sensitive and sensitive taxa. The Shannon index resulted in a score of 4.7, demonstrating a diverse macroinvertebrate community.
WEGC-1	Weogufka Ck	Coosa	45A	124.8	031501070603	AL03150107-0603-110	S/F&W	5	32.91046	-86.41979			Good	Good		Weogufka Creek is a *Swimming, Fish and Wildlife (S/F&W)* stream located near of the city of Rockford, Alabama. At WEGC-1, the stream drains approximately 125 square miles in Coosa County. Based on the 2011 National Land Cover Dataset, landuse within the watershed is primarily forest (70%), with some pasture/hay, grassland/herbaceous and shrub/scrub areas. As of April 1, 2017, no outfalls were active in this watershed. This watershed has outstanding recreational significance as the Southernmost of the terminus of the Appalachian Trail that connects to Alabama's Pinhoti Trail. The condition of the macroinvertebrate community has been rated as good, with 67 total taxa collected, including eight highly sensitive, rare taxa, and 18 more commonly found sensitive taxa. Twenty-three percent of the organisms collected were sensitive or highly sensitive to pollution.
Escatawpa																
PPYM-1	Puppy Ck	Mobile	65F	42.3	031700080205	AL03170008-0205-101	F&W	5	30.98420	-88.40110			Poor	Good-excellent		Puppy Ck is a *F&W* stream located in the Mobile R Basin. Puppy Ck at PPYM-1 is a low gradient stream that drains a 42.3 square mile watershed through Mobile County in the Southern Pine Plains & Hills ecoregion (65f). Based on the 2011 National Land Cover Dataset, land use within the watershed is composed of forest (43.4%), with some shrub/scrub and pasture/hay. Approximately 4.3% of the watershed area is developed. As of Jan 1, 2017, there were no permitted outfalls active in this watershed. Results of the 2017 biological survey indicate the macroinvertebrate community in Puppy Creek at PPYM-1 to be in good-excellent condition. Sixty-one total taxa were collected, including 21 sensitive taxa.
Mobile																
HLB-1	Halls Ck	Baldwin	65F	19.6	031602040104	AL03160204-0104-100	F&W	5	31.05264	-87.83701		V	Fair	Good		Halls Ck is a F&W stream located in Baldwin County. Biological survey results indicate the macroinvertebrate community to be in good condition. There has been a small decrease in relative abundance of highly sensitive taxa; however, 7 highly sensitive and 8 sensitive taxa were collected, comprising 32% of the 47 total taxa collected.
Tallapoosa																
KNSR-10	Knokes Ck	Cleburne	45A	6.6	031501080803	AL03150108-0803-200	F&W	5	33.52334	-85.40835			Poor	Good-excellent		Biological survey results indicate the macroinvertebrate community to be in good condition. There is a small decrease in relative abundance of highly sensitive taxa; however, 8 highly sensitive and 12 sensitive taxa were collected, comprising 37% of the 54 total taxa collected.
KNSR-13	Knokes Ck	Randolph	45A	11.9	031501080803	AL03150108-0803-200	F&W	5	33.48416	-85.40231			Fair	Good-fair		Located downstream of KNSR-10, condition of the macroinvertebrate community to be in good-fair condition. Number of highly sensitive, sensitive, sensitive EPT taxa were all lower at this site in comparison to KNSR-10. Of the 56 total taxa collected, 7 attribute 2 taxa, and 12 attribute 3 taxa were collected. However, the relative abundance of highly sensitive, rare taxa comprised 20% of total individuals at KNSR-10 and only 2% of total organisms at KNSR-13.

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Station	Stream	County	ECO	Area (mi^2)	HUC	Assessment Unit	Use Class	2020 Cat	Lat	Long	SHU	Ref	Habitat	Biological Conditions		Biological survey rating justification
														Macro-inverte-brates	Fish	
OAKC-1	Oakachoy Ck	Coosa	45A	16.6	031501090701	AL03150109-0701-102	F&W	1	32.83413	-86.04025		V	Good	Good-fair		Biological survey results indicate the community to be in good-fair condition. Ninety-four taxa were collected, with 5 highly sensitive taxa, and 24 sensitive taxa collected. Median concentrations of hardness, dissolved iron and conductivity were above expected background conditions, based on data collected at ecoregional reference reaches. The single sample E. coli criteria for *F&W* streams was exceeded in Jun and Sep during above normal flow events.
Tennessee																
BERC-1	Bear Ck	Colbert	65J	722.0	060300060304	AL06030006-0304-102	F&W	5	34.66088	-88.09231	1		Fair		Good	The condition of the fish community was rated as good, with 25 total taxa, including one snail darter. However, only one individual was recorded for a number of species. It is a larger river making it harder to sample at times, but Bear Creek at Natchez Trace is known for its diversity.
CDRF-2	Cedar Ck	Franklin	65J	198.5	060300060204	AL06030006-0207-100	F&W	1	34.54271	-88.05698	1		Good		Excellent	The fish community of Cedar Creek at CDRF-2 was surveyed using Alabama's Fish Community Index of Biotic Integrity (AL-IBI). The condition of the fish community of Cedar Ck at this location was rated as excellent. However, this site had several No Fish efforts, and overall low abundance, potentially due to the presence of the dam ~7 miles upstream. The site maintains a diverse fish community, despite the abnormal flow frequencies and velocities seen at the site due to spillage at the dam. One Brindled Madtom, a conservation of concern species for the state of AL was collected.
CERF-1A	Cedar Ck	Franklin	65J	303.2	060300060207	AL06030006-0207-100	F&W	1	34.55199	-88.09935	1	S	Fair		Good	Located within Franklin County, Cedar Creek at CERF-1A is a high gradient stream in west Alabama that drains over 300 square miles. As part of a SHU watershed, the watershed maintains a geomorphically stable channel and a natural flow regime that support the behavior, growth, and survival of several federally listed endangered and threatened species, and several species listed to be of the *Highest* or *High Conservation Concern* by the state of Alabama. Based on the 2017 monitoring conducted by the ADEM, water quality conditions continue to be excellent. Overall fish diversity and taxa richness within the reach are good. Water quality sampling, fish, and macroinvertebrate community sampling should continue to monitor the ecological health of the stream.
INCL-1	Indiancamp Ck	Lauderdale	71F	8.4	060300050509	AL06030005-0509-800	F&W	5	34.92220	-87.62080		S	Good	Good-fair	Excellent	Indian Camp Ck is a *F&W* stream located approximately five miles northeast of the city of Florence. According to the 2011 National Land Cover Dataset, the watershed is mostly forest and pasture/hay with no permitted outfalls. It is located within a Strategic Habitat Unit that supports several federally listed threatened and endangered aquatic species that are also of High or Highest Conservation Concern by the state of Alabama. Both macroinvertebrate and fish surveys were conducted in Indiancamp Ck at INCL-1. Condition of both communities were in good or excellent condition.
LBRF-4	Little Bear Ck	Franklin	65I	78.2	060300060206	AL06030006-0206-101	S/F&W	5	34.48833	-88.03556	1		Fair	Fair	Good	Little Bear Ck is a *S/F&W* stream located in Franklin County. According to the 2011 National Land Cover Dataset, the watershed is over 59% forested with no permitted outfalls. It is located within a Strategic Habitat Unit that supports several federally listed threatened and endangered aquatic species that are also of High or Highest Conservation Concern by the state of Alabama. Survey results indicated the macroinvertebrate community in Little Bear Creek at LBRF-4 to be in fair condition, and the fish community was found to be in good condition. However, several physical and chemical parameters were elevated as compared to data from ADEM's least-impaired reference reaches in ecoregion 65I. Monitoring should continue to ensure that water quality and biological conditions remain stable.
RCKC-1	Rock Ck	Colbert	65J	53.6	060300060304	AL06030006-0304-500	F&W	5	34.65790	-88.09412	1		Fair		Excellent	The fish community in Rock Ck at RCKC-1 was surveyed using Alabama's Fish Community Index of Biotic Integrity (AL-IBI). The condition of the fish community was rated as excellent, identifying RCKC-1 as having one of highest functioning ecosystems found in AL. Taxa richness and diversity are outstanding, with 35 total native species, including three pollution-intolerant species. It is located within a Strategic Habitat Unit that supports several federally listed threatened and endangered aquatic species that are also of High or Highest Conservation Concern by the state of Alabama.

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														Macro-inverte-brates	Fish	
SHLL-1	Shoal Ck	Lauderdale	71F	433.4	060300050509	AL06030005-0509-102	F&W	1	34.95333	-87.59444		V	Good	Fair-poor	Excellent	Shoal Ck at Goose Shoals is well-known for its fish diversity. The Shoal Ck watershed has been identified as a SHU by USFWS for its high-quality habitats that support federally listed and state imperiled species, particularly Spotfin Chub, Snail Darter, Boulder Darter, and Ashy Darter. The 2017 fish community survey conducted by ADEM and TVA indicated the fish community to be in excellent condition, with 52 species observed, including four rare and sensitive species. While the large sampling reach natually lack some productive microhabitats for macroinvertebrates, habitat was optimal for supporting a diverse fish community, with ample stable substrates and natural aquatic plant beds in large riffle-run-pool sequences. Recent water quality conditions have warranted reintroductions of the Boulder Darter at the AL/TN state boundary, and other reintroductions should be considered within this SHU. As recently as 2020, the ADEM and the University of North Alabama discovered a single Snail Darter individual occupying a gravel run. This is the first documented known occurrence in the Shoal Creek watershed, further validating the benefit of restoration and conservation activities. Water quality sampling and fish community surveys should continue to monitor the exceptional ecological health of the stream.
Yellow																
PONC-1	Pond Ck	Covington	65G	5.8	031401030203	AL03140103-0203-200	F&W	2B	31.09315	-86.51805	45	V	Fair	Good		Pond Ck is a F&W stream located within the Conecuh National Forest in the Yellow River basin. It is located within one of 50 Strategic Habitat Units (SHU) designated by the U.S. Fish and Wildlife Service (USFWS) and the Alabama Rivers & Streams Network (ARSN). SHUs are recognized as high quality habitats occupied by federally listed and state imperiled species. According to the 2011 National Land Cover Dataset, the watershed is 85% forested with no permitted outfalls. The watershed has a very low road density, with only one paved road crossing approximately one mile upstream of the sampling location. The 2017 biological survey indicated the macroinvertebrate community to be in good condition, with 69 total taxa, including 7 sensitive taxa, collected.


Inman Ck at INMW-1
within the Bankhead
National Forest
04/12/2017 16:00

1


Choccolocco Ck at
CHOC-2 within the
Talladega National
Forest
04 04 2017 15:51

2


Weogufka Ck at
WGFC-1
05/17/2017 12:52

3


L Reedy Ck at
LRDC-1
9/26/2017

4


Cedar Ck at
CDRF-2
6/6/2017

5


Indiancamp Ck
at INCL-1
2/2/2017

6