

ADEM IBI SHU Fish Sampling



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Fish IBI Method



Habitat Assessments

Table 3. Habitat assessment for Big Canoe Creek at Goodwins Mill Dam (Upstream) conducted on May 15, 2013.

Habitat Assessment	% Maximum Score	Rating
Instream Habitat Quality	48	Marginal (41-<59)
Sediment Deposition	31	Poor (<41)
Riffle frequency	17.5	Poor (<45)
Bank Vegetative Stability	74	Sub-Optimal (60-<75)
Riparian Buffer	90	Sub-Optimal (70-90)
Habitat Assessment Score	111	
% of Maximum Score	55	Marginal (41-<59)

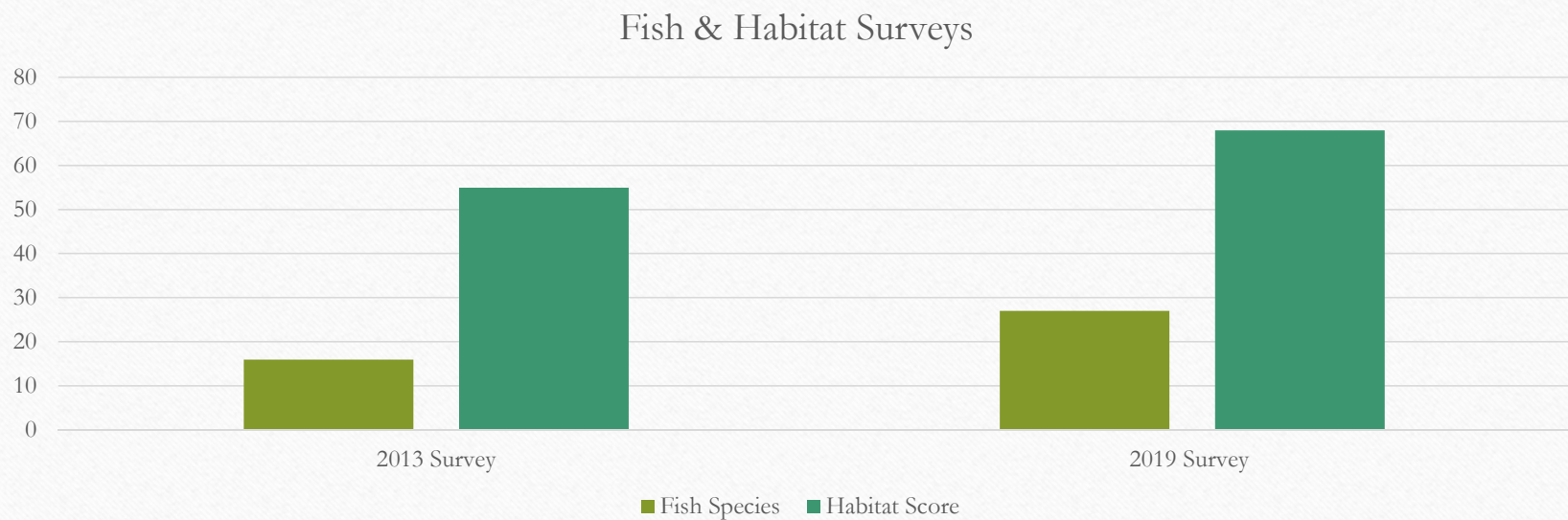
Table 3. Habitat Assessment for Big Canoe Creek at Goodwins Mill Dam (Upstream) conducted on June 25, 2019.

Habitat Assessment	% Maximum Score	Rating
Instream Habitat Quality	74	Sub-Optimal (55-79)
Sediment Deposition	70	Sub-Optimal (55-79)
Riffle frequency	37.5	Marginal (31-<55)
Bank Vegetative Stability	66	Sub-Optimal (58-79)
Riparian Buffer	73	Sub-Optimal (60-84)
Habitat Assessment Score	136	
% of Maximum Score	68	Sub-Optimal (57-80)

Goodwins Mill Dam 2013-2019



Improved Habitat and Fish Biodiversity



ADEM Stations

ADEM Code	Description	Latitude	Longitude	Protocol
SL-3	Brushy Cr Upstream of North Loop of Lawrence Co. Rd. 73 (east of Co. Rd 70) in Bankhead National Forest	34.3307	-87.2862	Wade
DL-21	Beaverdam Cr @ McDonald Property	34.68869	-86.82832	Wade
	Cahaba River at St. Clair CR 10 (Roper Rd) at Whites Chapel	33.60503	-86.54924	Wade
BB-1	Cahaba River @ Hwy 82	32.946314	-87.140258	Wade/Boat
BJ-6	Cahaba River at Grants Mill Road	33.51152	-86.65258	Wade
HS-1	Cahaba River at Bains Bridge (Old Montgomery Hwy)	33.3635	-86.8132	Wade
P-13	Coal Fire Creek on Water Mill Rd., 2 mi. west of Palmetto	33.49181	-88.01387	Wade
M-1	at Oscar Patterson Road	34.88059	-86.4805	Wade
T-2	Hatchet Creek at Dunham Property	32.9998	-86.1425	Wade
T-3	Hatchet Creek at East Mill (CR 4)	33.13045	-86.05469	Wade
TC-4	Hatchet Cr approx. 4 mi us of Coosa CR 18 at the McConnell Property	32.94392	-86.23579	Wade
RR-1	Hurricane Ck just off Jackson CR 9	34.91799	-86.133	Wade

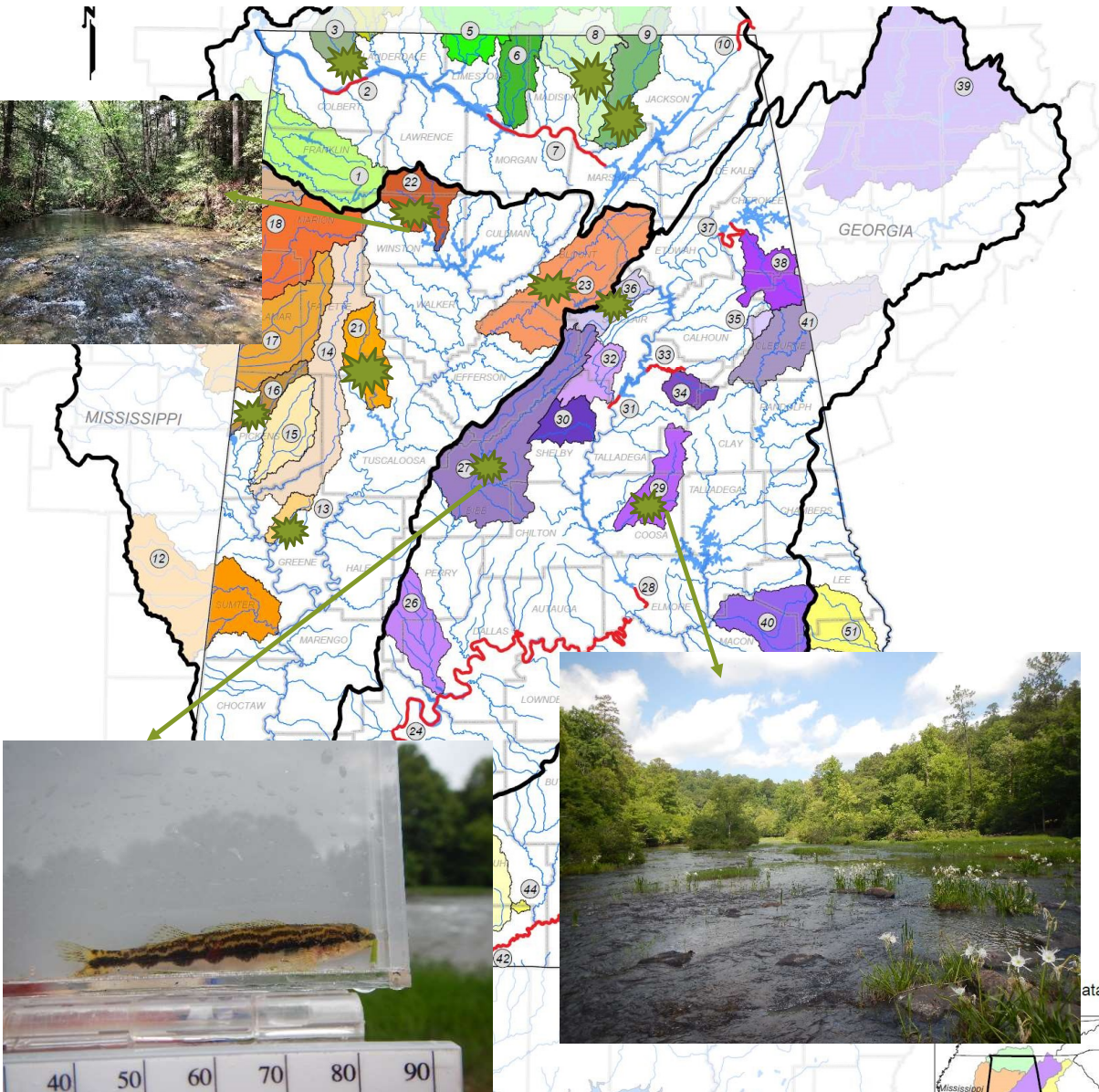
ADEM Code	Description	Latitude	Longitude	Protocol
LFKB-8	Locust Fork @ Warrior-Kimberly Road	33.809306	-86.80075	Wade
LFKB-8A	Locust Fork at Deans Ferry.	33.846333	-86.727389	Wade
LFKJ-4	Locust Fork at CR 12 "Flat Top Road"	33.65705	-87.02729	Boat
LIML-35	Limestone Ck @ CR 12 (Old Hwy 20)	34.671167	-86.864849	Wade
LRKJ-1	Larkin Fork @ AL Hwy. 65	34.8659	-86.20796	Wade
LRKJ-2	Larkin Fork @ Jackson Co. Hwy. 27	34.92861	-86.21998	Wade
NRRT-1	North River at CR 38	33.47980015	-87.5968055	Wade
PICL-11	Cypress Creek at Lauderdale Co. Rd. 14	34.80806	-87.70056	Wade
SF-1	Sipsey Fork at Winston CR 60 (Cranal Road)	34.285583	-87.399056	Wade
SHDJ-3	Shades Creek @ CR 12	33.221083	-87.032667	Wade
SHDJ-6	Shades Creek at Dickey Springs Road	33.32586	-86.94863	Wade
TRSG-1	Trussells Creek at Greene Co. Rd. 20 east of Gainesville.	32.83318	-88.06255	Wade

ARSN Projects/Sites



Wade Sites

Stream Description	Latitude	Longitude	Protocol	IBI Score/Condition
Paint Rock River downstream of AL Hwy. 146	34.86011	-86.1972	Wade	52/Excellent
Larkin Fork downstream of Duboise Hollow off of AL Hwy. 65	34.96355	-86.22103	Wade	46/Good
Cypress Creek at Lauderdale Co. Hwy. 8	34.93187	-87.79	Wade	46/Good
Big Canoe Creek downstream of Goodwins Mill Dam	33.81894	-86.382427	Wade	38/Fair
Big Canoe Creek upstream of Goodwins Mill Dam	33.81999	-86.385275	Wade	42/Fair
Calvert Prong at Fountain Property	33.92158	-86.59692	Wade	42/Good
Mulberry Fork at Hurricane Creek confluence	34.092413	-86.689642	Wade	40/Fair



2019 ADEM SHU Sites

	Watershed		Wade	Boat
2019	Cypress Shoal Locust Fork Cahaba North River Larkin Fork Trussels	Coalfire Hatchet Limetstone Paint Rock	30	6
2020	Elk River at Trend Site (Prospect, TN) Weiss Bypass Cahaba River (Goldline Darter Survey)		X X	X X

Boat sites

Stream Description	Lattitude	Longitude	Protocol
Shoal Creek downstream of Goose Shoals	34.94135	-87.60069	Boat/Wade
Shoal Creek Near AL/TN State Line	34.97060	-87.59258	Boat
Cahaba River downstream of U.S. Hwy. 82	32.91079	-87.13907	Boat/Wade
Locust Fork at Flat Top Road	33.6649	-87.0317	Boat
Cypress Creek at TN River Confluence	34.7875	-87.6972	Boat
Cypress Creek at Wildwood Park	34.805	87.6999	Boat



Nonwadeable IBI Cahaba River



Habitat Loss & Fragmentation







Restoration Success!



Fish Passage Issues

Poor Designs

1. Perched Culvert
2. Failing Fill Material
3. No Access to Reproduction Areas
4. Genetic Bottlenecks



Bridge/Culvert Assessments



Stability Concerns During High Flow





Coming together
IS A BEGINNING.

Keeping together
IS PROGRESS.

Working together
IS SUCCESS.

HENRY FORD

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