

Summary of Listing Decisions for the 2020 305b/303d List of Waters

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Summary of Listing Decisions

The Georgia Environmental Protection Division (EPD) used its 2020 Listing Assessment Methodology in making its listing decisions. This document provides more detail to explain why certain listing decisions were made including (1) how the “natural conditions” provisions in our water quality standards are used when making listing decisions and (2) why other waters were placed or remain in Category 2 or Category 3.

Assessment of Waters Based on “Natural Water Quality”

Chapter 391-3-6-.03(7) of the Rules and Regulations for Water Quality Control recognizes that some waters of the State “naturally” will not meet the instream criteria and that this situation does not constitute a violation of water quality standards. Many waters in Georgia, specifically areas in South Georgia and near the Coast, have “natural” dissolved oxygen concentrations below the State’s standard dissolved oxygen (DO) criteria (daily average of 5.0 mg/l and an instantaneous minimum of 4.0 mg/l). Many of these waters were placed in Category 3 (Assessment Pending) when the DO criteria were not met, but it was determined that the cause was likely due to natural water quality conditions versus a human caused condition. The placement of waters in Category 3 for DO is explained in more detail later in this document.

EPD also considered things such as the presence of beaver dams when evaluating water quality data. While the presence of beaver dams and ponds can help improve water quality by trapping sediment and removing nutrients through increased plant production, the stagnant water in the beaver pond will naturally have different characteristics than a free-flowing stream (e.g. lower DO). Waters were not listed as being impaired for DO if they were impacted by a beaver dam and it was determined that human activities were not contributing to the low DO. In addition, waters were not listed as impaired for DO if the natural DO of the water has been established via a TMDL or other document and the measured DO was not below the natural DO for the waterbody.

Georgia has many blackwater streams. The pH of blackwater streams is naturally low. If a water has been identified as a blackwater stream, then it was not listed as impaired for pH as long as there are not point source or land use issues that may be contributing to the low pH measured in the stream.

The two tables below list the waters where EPD determined that low DO and pH are due to natural conditions. These waters were not listed as impaired for DO or pH.

Table 1 - Waters Determined to Have Naturally Low DO

AUID	AUNAME	AULOCATION	BASIN
GAR030701070104	Cypress Creek	Rolands Pond to Ochopee River	Altamaha
GAR031101030102	Aucilla River	Masse Branch to Brooks County line near Boston	Ochlockonee
GAR031200020302	Big Creek	Woodhaven Rd. East of Coolidge to Ochlockonee River	Ochlockonee
GAR031200020402	Big Creek	Headwaters to Little Creek near Meigs	Ochlockonee
GAR031200020102	Little Creek	Ga. Hwy. 37 to Ochlockonee River near Moultrie	Ochlockonee
GAR031200020104	Ochlockonee River	Headwaters, upstream Ga. Hwy. 112 near Sylvester to Bay Branch, East of Bridgeboro	Ochlockonee
GAR030702020402	Boggy Creek	Dry Creek to Little Satilla Creek North of Screven	Satilla
GAR030702020404	Little Satilla Creek	Keene Bay Branch to Dry Branch near Odum	Satilla
GAR030702010301	Red Bluff Creek	Little Red Bluff Creek to Satilla River East of Pearson	Satilla
GAR030702040602	Boone Creek	Upstream St. Marys River	St. Marys
GAR030702040701	Corn House Creek	Upstream St. Marys River	St. Marys
GAR030702040901	St. Marys Trib. 5 (aka Cooner Branch)	Upstream St. Marys River	St. Marys
GAR031102021202	Cow Creek	Headwaters to Alapaha River	Suwannee
GAR031102020101	Double Run Creek	Upstream SR 90 to Alapaha River near Rebecca	Suwannee
GAR031102020801	Fivemile Creek	Downstream Gaskins Pond to Big Creek near Nashville	Suwannee
GAR031102010103	Greasy Branch	U.S. Hwy. 84/SR 38 to Okefenokee Swamp	Suwannee
GAR031102030102	Hardy Mill Creek	U.S. Hwy 319, S. of Tifton to Withlacoochee River	Suwannee
GAR031102010301	Suwannoochee Creek	Lees Bay to Suwannee River	Suwannee
GAR031102010302	Suwannoochee Creek	Bear Branch to Lees Bay	Suwannee
GAR031102020802	Tenmile Creek	Averys Millpond to Big Creek near Nashville	Suwannee
GAR031102040301	Warrior Creek	Rock Creek to Ty Ty Creek near Norman Park	Suwannee

Table 2 - Waters Determined to Have Naturally Low pH

AUID	AUNAME	AULOCATION	BASIN
GAR030701060503	Alex Creek	Mason Cowpen Branch to Altamaha River	Altamaha
GAR030701060102	Cobb Creek	Oconee Creek to Altamaha River	Altamaha
GAR030701060405	Doctors Creek	Upstream Jones Creek	Altamaha
GAR030701070208	Flat Creek	Headwaters to Little Ohoopsee River	Altamaha
GAR030701060302	Goose Creek	Upstream Rd. S1922 (Walton Griffis Rd.) to Little Goose Creek	Altamaha
GAR030701070303	Jacks Creek	U.S. Hwy. 1 to Ohoopsee River	Altamaha
GAR030701060404	Jones Creek	Still Creek to Doctors Creek	Altamaha
GAR030701060408	Little Creek	Gum Branch to Honey Camp Branch	Altamaha
GAR030701070205	Magruda Creek	Headwaters to Little Ohoopsee River	Altamaha
GAR030701060407	Milliken Bay	Headwaters to Little McMillen Creek	Altamaha
GAR030701070105	Neels Creek	Bear Creek to Ohoopsee River	Altamaha
GAR030701060103	Oconee Creek	Headwaters to Cobb Creek	Altamaha
GAR030701070501	Ohoopsee River	Hwy 292 to Hwy 147	Altamaha
GAR030701070502	Ohoopsee River	Ga. Hwy 147 to Confluence with Altamaha River	Altamaha
GAR030701070401	Pendleton Creek	Sand Hill Lake to Reedy Creek	Altamaha
GAR030701070402	Pendleton Creek	Wildwood Lake to Tiger Creek	Altamaha
GAR030701070407	Pendleton Creek	Reedy Creek to Swift Creek	Altamaha
GAR030701060403	Penholoway Creek	Little Creek to Altamaha River	Altamaha
GAR030701070207	Sardis Creek	Headwaters to Little Ohoopsee River	Altamaha
GAR030701060201	Ten Mile Creek	Little Ten Mile Creek to Altamaha River	Altamaha
GAR030701070506	Thomas Creek	Downstream CR203 to Ohoopsee River	Altamaha
GAR030701070403	Tiger Creek	Little Creek to Pendleton Creek	Altamaha
GAR030701060310	Tributary to Spring Branch	Tributary 360 feet downstream City of Glennville to Spring Branch	Altamaha
GAR030701070306	Yam Grandy Creek	Tributary 1.1 miles upstream of County Road 175 to Crooked Creek	Altamaha

GAR031300030303	Upatoi Creek	Upstream Chattahoochee River, Columbus	Chattahoochee
GAR031300051313	Beaver Creek	Headwaters to Patsiliga Creek, Butler	Flint
GAR031300051411	Beaver Creek	Headwaters to Spring Creek	Flint
GAR031300060201	Buck Creek	Fox Branch to Flint River near Oglethorpe	Flint
GAR031300051504	Cedar Creek	Turkey Branch to Whitewater Creek	Flint
GAR031300051602	Horse Creek	Taylor Mill Lake to Flint River	Flint
GAR031300051312	Patsiliga Creek	Beaver Creek to Flint River, Butler	Flint
GAR031300051314	Patsiliga Creek	Headwaters to McCants Mill Pond	Flint
GAR031300050509	Walnut Creek	Meriwether County	Flint
GAR031300051505	Whitewater Creek	Cedar Creek to Flint River	Flint
GAR031300051506	Whitewater Creek	Big Whitewater Creek to Cedar Creek	Flint
GAR031200020302	Big Creek	Woodhaven Rd. East of Coolidge to Ochlockonee River	Ochlockonee
GAR031101030202	Connell Creek	Headwaters to the Florida State Line	Ochlockonee
GAR031200020102	Little Creek	Ga. Hwy. 37 to Ochlockonee River near Moultrie	Ochlockonee
GAR031200030201	Swamp Creek	SR 262 to Stateline	Ochlockonee
GAR031200020303	Tributary to Big Creek	Headwaters to Big Creek	Ochlockonee
GAR030701040703	Alligator Creek	Headwaters to Horse Creek	Ocmulgee
GAR030701050205	Alligator Creek	1 mile d/s U.S. Hwy. 280 to Little Ocmulgee River	Ocmulgee
GAR030701050206	Alligator Creek	Batson Creek to Lime Sink Creek	Ocmulgee
GAR030701040702	Big Horse Creek	Alligator Creek to Ocmulgee River	Ocmulgee
GAR030701040812	Fishing Creek	Headwaters to the Ocmulgee River	Ocmulgee
GAR030701040601	House Creek	Ball Creek to Little House Creek	Ocmulgee
GAR030701050405	Little Ocmulgee River	Wilcox Creek to Alligator Creek	Ocmulgee
GAR030701050406	Little Ocmulgee River	Little Ocmulgee State Park Lake to Wilcox Creek	Ocmulgee
GAR030701040813	Opposum Creek	Headwaters to the Ocmulgee River	Ocmulgee
GAR030701050305	Sugar Creek	Headwaters to Turnpike Creek	Ocmulgee

GAR030701040814	Tributary to Red Bluff Creek	Headwaters to Red Bluff Creek	Ocmulgee
GAR030701050303	Turnpike Creek	Hwy 280 to Sugar Creek	Ocmulgee
GAR030701021203	Mercer Creek	Downstream Graham Pond to Red Hill Creek	Oconee
GAR030701021302	Ochwalkee Creek (aka Okeewalkee Creek)	Unnamed tributary 550 ft upstream Little New York Road to Oconee River	Oconee
GAR030701021403	Peterson Creek	Headwaters to Oconee River	Oconee
GAR030701021408	Peterson Creek	Headwaters to State Route 19 (South 2nd Street)	Oconee
GAR030701021409	Peterson Creek	State Route 19 (South 2nd Street) to the Oconee River	Oconee
GAR030701020904	Pughes Creek	Indian Branch to Oconee River	Oconee
GAR030701021011	Stitchihatchie Creek	Whitley Branch to Rocky Creek	Oconee
GAR030701021407	Tributary to Limestone Creek	400 ft downstream Mt. Vernon Alston Road to Limestone Creek	Oconee
GAR030701021205	Whitewater Creek	Headwaters to Unnamed tributary 0.8 miles downstream of GA Hwy 19 South	Oconee
GAR030602020504	Ash Branch	Futch Branch to Lower Black Creek	Ogeechee
GAR030602010202	Big Creek	Headwaters to the Ogeechee River	Ogeechee
GAR030602020501	Black Creek	Ash Branch to Mill Creek near Blitchton	Ogeechee
GAR030602030410	Bull Creek	Strickland Pond to Canoochee River near Daisy	Ogeechee
GAR030602030501	Canoochee Creek	Taylor's Creek to Canoochee River, Fort Stewart	Ogeechee
GAR030602030506	Canoochee Creek	Upstream SR 119, Ft. Stewart	Ogeechee
GAR030602030101	Canoochee River	Ga. Hwy. 192 to Fifteen Mile Creek near Metter	Ogeechee
GAR030602030409	Canoochee River	Cedar Creek to Lotts Creek	Ogeechee
GAR030602030411	Canoochee River	Fifteen Mile Creek to Cedar Creek	Ogeechee
GAR030602030602	Canoochee River	Lotts Creek to Savage Creek	Ogeechee
GAR030602030603	Canoochee River	Savage Creek to Ogeechee River	Ogeechee
GAR030602030407	Cedar Creek	Water Hole Creek to Canoochee River, Claxton	Ogeechee
GAR030602030201	Fifteenmile Creek	Stocking Head Branch to Canoochee River near Metter	Ogeechee

GAR030602020502	Irish Branch	Pond 0.5 miles downstream US 80 to Upper Black Creek	Ogeechee
GAR030602040208	Little Ogeechee River	Little Ogeechee Pond to below US Hwy. 17 near Burroughs	Ogeechee
GAR030602040209	Little Ogeechee River	Ogeechee Run to Little Ogeechee Pond	Ogeechee
GAR030602030508	Long Branch	Headwaters to Canoochee Creek	Ogeechee
GAR030602030312	Lotts Creek	Big Branch to Cypress Lake	Ogeechee
GAR030602020505	Lower Black Creek	Luke Swamp Branch to Ash Branch	Ogeechee
GAR030602020402	Mill Creek	Akins Pond to Newsome Branch	Ogeechee
GAR030602020508	Mill Creek	George Branch to Black Creek	Ogeechee
GAR030602040530	Mount Hope Creek	Raccoon Branch to Jerico River	Ogeechee
GAR030602020302	Nevills Creek	Bay Gull Creek to Ogeechee River near Rocky Ford	Ogeechee
GAR030602020201	Ogeechee Creek	Rd. S2178 to Ogeechee River near Oliver	Ogeechee
GAR030602010409	Ogeechee River	Spring Creek to Williamson Swamp Creek	Ogeechee
GAR030602020304	Ogeechee River	Hwy. 102 to U.S. Hwy 301	Ogeechee
GAR030602020503	Pole Branch	Headwaters to Upper Black Creek	Ogeechee
GAR030602010302	Rocky Comfort Creek	Duhart Creek to Ogeechee River, Louisville	Ogeechee
GAR030602030505	Taylor's Creek	Upstream WPCP Drainage Canal, Fort Stewart	Ogeechee
GAR030602030408	Tenmile Creek	Upstream Canoochee River, Excelsior	Ogeechee
GAR030602020511	Tributary to Mill Creek	Unnamed tributary 0.3 miles upstream Sims Road to Mill Creek	Ogeechee
GAR030602030604	Tributary to the Canoochee River	Tributary near S.R. 67 to the Canoochee River	Ogeechee
GAR030602020509	Upper Black Creek	Crombly Pond to Lower Black Creek	Ogeechee
GAR030602030311	Wateringhole Branch	Granna Branch to Dry Branch	Ogeechee
GAR030602010505	Williamson Swamp Creek	Headwaters to Mays Millpond	Ogeechee
GAR030702011003	Alabaha River	Hurricane Creek to Tan Trough Creek	Satilla
GAR030702011004	Alabaha River	Tan Trough Creek to Satilla River	Satilla

GAR030702010903	Big Branch	Mill Branch to Little Hurricane Creek	Satilla
GAR030702010704	Big Creek	South Prong Big Creek to Satilla River	Satilla
GAR030702010712	Big Creek	Laura S. Walker Lake to South Prong Big River	Satilla
GAR030702020101	Big Satilla Creek	Headwaters near Hazlehurst to Sweetwater Creek near Baxley	Satilla
GAR030702020302	Big Satilla Creek	Sweetwater Creek to Colemans Creek	Satilla
GAR030702020103	Bishop Creek	Lake Mayers to Big Satilla Creek	Satilla
GAR030702020405	Boggy Creek	Headwaters to Lake Lindsay Grace	Satilla
GAR030702010401	Broxton Creek	Seven Creek to Seventeen Mile River near Broxton	Satilla
GAR030702011102	Buffalo Creek	Little Buffalo Creek to Satilla River	Satilla
GAR030702020301	Colemans Creek	Dry Branch South of Surrency to Big Satilla Creek near Screven	Satilla
GAR030702010710	Cox Creek	Headwaters to the Satilla River	Satilla
GAR030702010606	Dry Creek	Headwaters to Hurricane Creek	Satilla
GAR030702020406	Dry Creek	Headwaters to Boggy Creek	Satilla
GAR030702010601	Hog Creek	Hurricane Creek to Satilla River South of Nicholls near Bickley	Satilla
GAR030702010603	Hurricane Creek	Bear Creek to Dry Creek	Satilla
GAR030702010801	Hurricane Creek	Whitehead Creek to downstream Little Creek	Satilla
GAR030702010803	Hurricane Creek	Tributary near Sunflower Road to Fox Branch	Satilla
GAR030702011001	Hurricane Creek	Downstream Little Creek to Ten Mile Creek near Alma	Satilla
GAR030702010711	Kettle Creek	Headwaters to the Satilla River	Satilla
GAR030702010901	Little Hurricane Creek	Ga. Hwy. 32 to Hurricane Creek	Satilla
GAR030702010902	Little Hurricane Creek	Headwaters to Ga. Hwy 32	Satilla
GAR030702010303	Little Red Bluff Creek	Headwaters to Red Bluff Creek	Satilla
GAR030702020401	Little Satilla Creek	Boggy Creek to Little Satilla River near Screven	Satilla
GAR030702020404	Little Satilla Creek	Keene Bay Branch to Dry Branch near Odum	Satilla

GAR030702020407	Little Satilla Creek	Dry Branch to Boggy Creek (Dry Creek)	Satilla
GAR030702020409	Little Satilla Creek	Alisons Creek to Keene Bay Branch	Satilla
GAR030702011104	Little Satilla River	Sixty Foot Branch to Satilla River	Satilla
GAR030702020502	Little Satilla River	Big Satilla Creek to Sixty Foot Branch	Satilla
GAR030702010714	Mill Creek	Lake Floree to Big Creek	Satilla
GAR030702010505	Otter Creek	Tiger Creek to Seventeen Mile River	Satilla
GAR030702010509	Otter Creek	Tributary 0.3 miles upstream New Forest Hwy to Tiger Creek	Satilla
GAR030702020503	Otter Creek	Long Branch to Griffin Branch	Satilla
GAR030702010201	Pudding Creek	Park Bay to Satilla River N. of Pearson	Satilla
GAR030702010301	Red Bluff Creek	Little Red Bluff Creek to Satilla River East of Pearson	Satilla
GAR030702020403	Reedy Creek	Headwaters to Little Satilla Creek near Screven (Previously called Headwaters to Big Satilla Creek)	Satilla
GAR030702010102	Satilla Creek	Hunters Creek East of Ocilla to Satilla River	Satilla
GAR030702010204	Satilla River	Reedy Creek to Indian Creek	Satilla
GAR030702010302	Satilla River	Pudding Creek to Smut Branch near Pearson	Satilla
GAR030702010304	Satilla River	Smut Branch to Red Bluff Creek	Satilla
GAR030702010703	Satilla River	Seventeen Mile River to US Hwy 84/Ga. Hwy. 38	Satilla
GAR030702011103	Satilla River	U.S. Highway 84/Ga. Hwy. 38 to 6 miles downstream Hwy 15/121	Satilla
GAR030702011105	Satilla River	Six miles downstream of Ga. Hwy. 15 to Buffalo Creek	Satilla
GAR030702011201	Satilla River	Rose Creek to White Oak Creek	Satilla
GAR030702011207	Satilla River	Buffalo Creek to Bullhead Bluff	Satilla
GAR030702010501	Seventeen Mile River	Otter Creek (Douglas) to Twentynine Mile Creek	Satilla
GAR030702010502	Seventeen Mile River	Twenty Mile Creek North of Douglas to Otter Creek downstream General Coffee State Park	Satilla

GAR030702010503	Seventeen Mile River	Twentynine Mile Creek to Satilla River	Satilla
GAR030702020504	Sixty Foot Branch	Headwaters to Otter Creek	Satilla
GAR030702010713	South Prong Big Creek	Headwaters to Big Creek	Satilla
GAR030702020201	Sweetwater Creek	Black Water Creek to Big Satilla Creek near Baxley	Satilla
GAR030702020505	Tributary #1 to Sixty-foot Branch	Headwaters to Sixty-foot Branch	Satilla
GAR030702020411	Tributary to Little Satilla Creek	Headwaters to Little Satilla Creek	Satilla
GAR030702030233	Tributary to the Turtle River	Headwaters at Lake Erie Drive to 0.8 miles downstream Emanuel Church Road	Satilla
GAR030702011209	Waverly Creek	Headwaters to Quarterman Creek	Satilla
GAR030601060601	Butler Creek	Phinazy Ditch to Savannah River, Augusta	Savannah
GAR030601090205	Cowpen Branch	Headwaters to Runs Branch	Savannah
GAR030601090209	Devils Branch	Headwaters to Runs Branch	Savannah
GAR030601090203	Ebenezer Creek	Long Bridge to Savannah River near Springfield	Savannah
GAR030601090208	Jacks Branch	White Deer Branch to Ebenezer Creek	Savannah
GAR030601090210	Little Ebenezer Creek	Headwaters to Ebenezer Creek	Savannah
GAR030601090311	Lockner Creek	Headwaters to the Savannah River	Savannah
GAR030601090312	Pipe Makers Canal	Unnamed Tributary upstream of Dean Forest Road to the Savannah River	Savannah
GAR030601090206	Runs Branch	Sand Pond to Cowpen Branch	Savannah
GAR030601090211	Runs Branch	Cowpen Creek to Turkey Creek	Savannah
GAR030601090204	Runs Branch (Ebenezer Creek)	Cowpen Creek to Little Ebenezer Creek near Clyo	Savannah
GAR030601060308	Spirit Creek	McDade Pond to Savannah River	Savannah
GAR030601090308	St. Augustine Creek	Walthour Swamp to Front River near Port Wentworth	Savannah
GAR030601090207	Turkey Branch	Headwaters to Runs Branch	Savannah
GAR030702040602	Boone Creek	Upstream St. Marys River	St. Marys
GAR030702040305	Clay Branch	Headwaters to Spanish Creek	St. Marys
GAR030702040701	Corn House	Upstream St. Marys River	St. Marys

	Creek		
GAR030702040804	Hatchers Branch	Headwaters to Spanish Creek	St. Marys
GAR030702040306	North Prong St. Marys River	Headwaters to Cedar Creek	St. Marys
GAR030702040307	North Prong St. Marys River	Cedar Creek to South Prong St. Marys River	St. Marys
GAR030702040801	Spanish Creek	Long Branch to St. Marys River	St. Marys
GAR030702040802	Spanish Creek	Little Spanish Creek to Long Branch	St. Marys
GAR030702040601	St. Marys River	Confluence of North & South Prong of St. Marys River to Cornhouse Creek	St. Marys
GAR030702040903	St. Marys River	Upstream Cabbage Bend to Catfish Creek	St. Marys
GAR030702040904	St. Marys River	Catfish Creek to Millers Branch	St. Marys
GAR030702040905	St. Marys River	Cornhouse Creek to St. Marys Cut	St. Marys
GAR030702040901	St. Marys Trib. 5 (aka Cooner Branch)	Upstream St. Marys River	St. Marys
GAR031102020301	Alapaha River	U.S. Hwy. 280 to Sand Creek	Suwannee
GAR031102020402	Alapaha River	Sand Creek to U.S. Hwy. 129/Ga. Hwy. 11	Suwannee
GAR031102020404	Alapaha River	U.S. Hwy. 129/Ga. Hwy. 11 to Willacoochee River	Suwannee
GAR031102021203	Alapaha River	Willacoochee River to Stateline	Suwannee
GAR031102021101	Alapahoochee River	Confluence of Mud and Grand Bay Creek to Stateline	Suwannee
GAR031102020911	Banks Lake	Lanier County	Suwannee
GAR031102030307	Beaverdam Creek	Rays Millpond to Cat Creek	Suwannee
GAR031102020804	Big Creek	Fivemile Creek to Mill Creek	Suwannee
GAR031102020805	Big Creek	Pond 0.3 miles upstream of GA-11 (East Main Street) to the Alapaha River	Suwannee
GAR031102010102	Cane Creek	Rooty Branch to Okeefenokee Swamp near Homerville	Suwannee
GAR031102030304	Cat Creek	Beatty Mill Creek to Withlacoochee River near Ray City	Suwannee
GAR031102030305	Cat Creek	Beaverdam Creek downstream SR 37 to Beatty Mill Creek	Suwannee
GAR031102030308	Cat Creek	Batterbee Branch to Beaverdam Creek	Suwannee

GAR031102021202	Cow Creek	Headwaters to Alapaha River	Suwannee
GAR031102020801	Fivemile Creek	Downstream Gaskins Pond to Big Creek near Nashville	Suwannee
GAR031102040503	Franks Creek	State Route S1780 to Little River near Hahira	Suwannee
GAR031102020908	Grand Bay Creek	Grand Bay to Alapahoochee River	Suwannee
GAR031102020305	Hat Creek	Headwaters to Unnamed tributary 980 feet upstream of Bussey Rd	Suwannee
GAR031102040304	Horse Creek	Headwaters near Sylvester to Warrior Creek	Suwannee
GAR031102030409	Indian Trail Branch	Pond 0.75 miles upstream Adel Hwy to Bear Creek	Suwannee
GAR031102010203	Jones Creek (aka Tatum Creek)	Dry Branch to the Suwannee River	Suwannee
GAR031102030903	Jumping Gully Creek	Bevel Creek to State Line	Suwannee
GAR031102040102	Little River	Newell Branch, downstream Hwy. 32 to Ashburn Branch, West of Sycamore	Suwannee
GAR031102040105	Little River	Big Branch to Warrior Creek	Suwannee
GAR031102010106	Little Suwannee Creek	Headwaters to Suwannee Creek	Suwannee
GAR031102020803	Mill Creek	Lake Irma to Big Creek	Suwannee
GAR031102040501	Morrison Creek	Headwaters to Wells Mill Creek (Adel)	Suwannee
GAR031102030602	Mule Creek	Headwaters to Reedy Creek near Pavo	Suwannee
GAR031102030603	Okapilco Creek	Rainy Creek to Mule Creek	Suwannee
GAR031102030703	Piscola Creek	Downstream Whitlock Branch @ Ozell Road to Allen Branch	Suwannee
GAR031102030704	Piscola Creek	Allen Branch to Okapilco Creek near Boston	Suwannee
GAR031102030705	Piscola Creek	Headwaters to Tributary 0.3 miles upstream of Pope Road	Suwannee
GAR031102030706	Piscola Creek	Tributary 0.3 miles upstream of Pope Road to Whitlock Branch	Suwannee
GAR031102030707	Piscola Creek	Downstream Whitlock Branch @ Ozell Road to Dry Lake Creek	Suwannee
GAR031102030708	Piscola Creek	Dry Lake Creek to Allen Branch	Suwannee

GAR031102030702	Pride Branch (Formerly Negro Branch)	Headwaters to Piscola Creek, Quitman	Suwannee
GAR031102010105	Suwannee Creek	Little Suwannee Creek to Water Oak Creek	Suwannee
GAR031102010501	Suwannee River	Mainstem-Suwannee Canal to Stateline	Suwannee
GAR031102010301	Suwannoochee Creek	Lees Bay to Suwannee River	Suwannee
GAR031102010302	Suwannoochee Creek	Bear Branch to Lees Bay	Suwannee
GAR031102010201	Tatum Creek	Tower Road to Jones Creek	Suwannee
GAR031102010202	Tatum Creek	Dickerson Millpond to Tower Road	Suwannee
GAR031102020802	Tenmile Creek	Averys Millpond to Big Creek near Nashville	Suwannee
GAR031102010502	Toms Creek	Headwaters to Stateline	Suwannee
GAR031102020609	Tributary to Turkey Branch	Tributary 300 feet upstream of W Cypress St to Turkey Branch	Suwannee
GAR031102030804	Tributary to Withlacochee River #2	Headwaters to Withlacochee River	Suwannee
GAR031102020607	Willacoochee River	Turkey Branch, upstream SR90/U.S. Hwy. 319 North of Ocilla to SR 90, Southeast of Ocilla	Suwannee
GAR031102020610	Willacoochee River	Turkey Branch to tributary 0.4 miles upstream of Frank Road	Suwannee
GAR031102020611	Willacoochee River	Tributary 0.4 miles upstream of Frank Road to SR 90	Suwannee
GAR031102030101	Withlacochee River	Headwaters (Hardy Mill Creek) to New River	Suwannee

Waters and Parameters in Category 3 (Assessment Pending)

A water is placed in Category 3 (Assessment Pending) when there is insufficient data or information to make an assessment on whether the water is meeting its designated use(s). The 2020 list of waters has 210 waters in Category 3. There are an additional 129 waters assessed as “Not Supporting” for one or more parameters where the assessment of other parameter(s) is still pending. For example, a water may have been assessed as “Not Supporting” for fecal coliform bacteria, but data is lacking to make an assessment for pH. Details regarding why a water or a

parameter has been placed in Category 3 can be found in the “notes” column of the 305(b)/303(d) list of waters. The most common reasons for why waters or parameters have been placed in Category 3 are provided below.

Waters in Category 3 for Bio M

Currently, Georgia’s Listing Assessment Methodology states that waters with macroinvertebrate data with a narrative rank of “fair” are put in Category 3. One reason that this is the case is that EPD has been working to revise the multi-metric index (MMI) used to assess macroinvertebrate data. We believe that for the most part, waters that were assessed as “supporting” under the current index (narrative rank of very good or good) will still be assessed as “supporting” under the revised index. Likewise, we believe that waters assessed as “not supporting” under the current index (narrative rank of poor or very poor) will still be assessed as “not supporting” under the revised index. We are less certain how waters ranked “fair” under the current index will rank once new indices are established. EPD has been working diligently to revise the MMI used to assess the health of the macroinvertebrate community. This is a lengthy process as EPD has determined that additional data need to be collected from some areas of the State prior to MMI revision. Collection of additional data is currently ongoing. In addition, EPD is currently working on revising the taxa list and tolerance values which are also needed for the MMI revision to be completed. EPD plans to keep the waters with a narrative rank of “fair” in Category 3 until the new indices can be established. The draft 2020 305(b)/303(d) list of waters has 51 waters in Category 3 based on sites that have a narrative rank of “fair” for macroinvertebrate sampling. There are an additional 22 waters that have been assessed as “not supporting” for other parameters, but for which the assessment of macroinvertebrate data is pending.

Waters in Category 3 for DO

There are 92 waters are in Category 3 while EPD works to determine the “natural DO” concentration for the water. There are an additional 58 waters that have been assessed as “not supporting” for other parameters for which the assessment of DO is pending determination of the “natural DO”. These waters are primarily located in the Southeastern Plain and Coastal Plain where DO can be naturally below the State’s criteria of 5.0 mg/L (daily average) and 4.0 mg/L (minimum). EPD has been working to develop new DO criteria for the Southeastern and Coastal Plains. Some issues that are being studied are potential differences in DO between blackwater, clear water, and tidal streams and the impact of stream order on “natural DO”. Once the new criteria have been adopted and approved by U.S. EPA, EPD will use these criteria to assess whether waters in this portion of the State are meeting their criteria for dissolved oxygen.

Waters in Category 3 for pH

According to EPD's Listing Assessment Methodology, a water is listed as impaired for pH if more than 10% of the pH measurements do not meet the pH criteria. Using pH data collected since 2017, almost 50 sites would need to be listed as impaired for low pH on the 2020 305b/303d list of waters. For the most part, the low pH values were in the mid to upper 5's which is close to the State's minimum criteria of 6.0. EPD believes there are a couple of factors that led to the low pH readings. First, EPD has reason to believe that our pH probes may be providing inaccurately low values, especially in waters where the conductivity is low. Second, we believe that low pH may be a natural condition for some waters with very low alkalinity. As discussed in the section above, if some waters of the State "naturally" will not meet the instream criteria and that this situation does not constitute a violation of water quality standards. These two factors are discussed in more detail below. EPD is placing these waters in Category 3 for pH while we determine if 1) the low pH readings we measured were accurate, 2) if the low pH readings are natural for some of the waters, or 3) if the low pH is actually a cause of impairment. In addition, EPD moved pH from being a cause of impairment for four waters to being in Category 3. This change was made as we believe that the low pH previously observed in these waters is either a natural condition or low conductivity may have led to inaccurate pH measurements. A table of the waters in question is provided at the end of this section along with information about the average conductivity and alkalinity of the water.

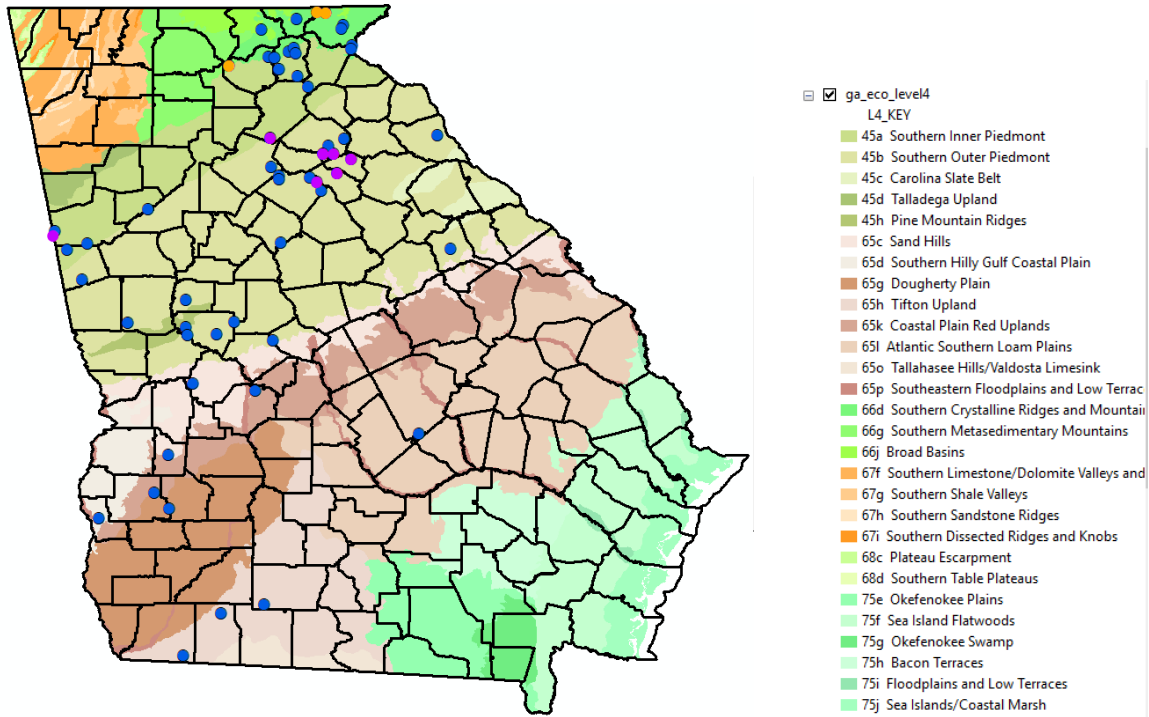
Questions about probe accuracy

Meters for measuring pH work by quantifying the difference in electrical potential between the solution you are measuring the pH of and reference solution contained within the probe. Measuring waters with low conductivity can be a challenge as the low electrical resistance of the sample solution can lead to pH drift and inaccurate measurements. The problem of accurately measuring pH in low conductivity waters increases when the water is flowing. EPD's standard operating procedure for measuring pH in the field calls for us to measure the pH instream where the water is normally flowing. We have found that when a stream has low conductivity, if pH is measured in the stream (i.e. in flowing water) the pH reading is often up to a half a point lower than if a sample of stream water is collected in a bucket and the pH is measured in the bucket (i.e. non-flowing water). This half a point difference would be high enough to move many of our pH readings that were below criteria to being within criteria. In addition, the pH of water samples is also measured in EPD's lab when water quality samples (such as nutrients and metals) are brought to the lab for analysis. The pH measured in the lab was normally higher than the pH that was measured in the field. In fact, for the approximately 50 sites that we would have listed for low pH based on data collected in the field, only 5 of the sites had any pH's measured below 6.0 in the lab.

Low Alkalinity Waters and Natural Conditions

In addition to questions about the accuracy of the pH data, EPD believes that some waters in Georgia (other than blackwater streams discussed above), may have naturally low pH. Specifically, naturally low pH may occur in waters that have low alkalinity. Alkalinity is a measure of a water's buffering capacity (its ability to resist change in pH when an acid is added). The alkalinity of a waterbody is generally a product of the land surrounding it. Waters in areas with limestone deposits contain more calcium carbonate that increases the buffering capacity of the water compared to waters in areas with granite deposits. If a water has a low alkalinity, the addition of acids will lead to lower pH. Weak acids naturally enter a waterbody through the deposition of organic material (like pine needles) and rainfall. It is important to note that pure water (such as rainfall) does not have a neutral pH of 7 but will often be slightly acidic. This is a function of the absorption of carbon dioxide from the atmosphere which forms a weak acid. Carbon dioxide absorption is also a factor in flowing streams with turbulence (e.g. a turbulent mountain stream will absorb more carbon dioxide from the atmosphere than still waters).

The map below shows where waters were placed into Category 3 due to low pH. The sites are represented by the round dots on the map. The colored areas in the map correspond to the different subcoregions of Georgia. Ecoregions are areas where the geography and ecology of an area is similar. It is interesting to note that no dots are found in the Northwest corner of the State. This area has limestone deposits and the alkalinity of waters in this area is naturally higher. Waters in the Northeast corner of the State tend to have very low alkalinity and conductivity. Low pH sites are found in this area of the State. Another indication that low pH may be natural at some of these locations is that three of the sites where low pH has been measured are part of EPD's Southeast Monitoring Network (SEMN). Sites included in the SEMN are located within least disturbed areas of the State (e.g. they are in areas with little human impact in their watersheds). These sites are indicated by the orange dots on the map. In addition, DNR's Wildlife Resources Division assessed the health of the fish community as good or excellent at seven of the other stream sites where EPD measured low pH values. These sites are represented by the purple dots on the map.



Waters Assessed in 2020 and Placed in Category 3 for pH

AUID	Name	Basin	Station	Lowest pH	Average Alkalinity	Average Conductivity
GAR031300020428	Milligan Creek	Chattahoochee	RV_12_4124	5.32	6	5
GAR031501040103	Jones Creek	Coosa	RV_14_4837	5.41	<5	<10
GAR030601020218	Tugalo Lake	Savannah	LK_01_67 LK_01_68	5.26 4.33	6 6	17 17
GAR031300051603	Bryants Swamp	Flint	RV_11_5111	4.33	6	28
GAR030601020204	Stekoa Creek	Savannah	RV_01_205 RV_01_208	5.50 5.50	10 10	27 35
GAR031300010104	Smith Creek	Chattahoochee	RV_12_17285	5.62	3	11
GAR031300010107	Chattahoochee River	Chattahoochee	RV_12_3984	5.71	3	13
GAR031300010114	Horton Creek	Chattahoochee	RV_12_17284	4.69	3	16
GAR031300010303	Mossy Creek	Chattahoochee	RV_12_4306	5.73	13	52
GAR031300010323	Little Mud Creek	Chattahoochee	RV_12_3900	5.65	18	65
GAR031300010502	Testnatee Creek	Chattahoochee	RV_12_3917	5.83	9	35
GAR031300010504	Town Creek	Chattahoochee	RV_12_17282	5.69	5	18

AUID	Name	Basin	Station	Lowest pH	Average Alkalinity	Average Conductivity
GAR031300010515	Tributary to the Chestatee River	Chattahoochee	RV_12_17281	5.46	4	19
GAR031300020304	Anneewakee Creek	Chattahoochee	RV_12_3949	5.64	16	60
GAR031300020433	Denny Creek	Chattahoochee	RV_12_17499	5.35	4.5	22
GAR031300020605	Brush Creek	Chattahoochee	RV_12_4225	5.69	17	40
GAR031300021006	White Sulfur Creek	Chattahoochee	RV_12_17314	5.23	11	41
GAR031300040107	Tributary to Cemochechobee Creek	Chattahoochee	RV_12_16762	5.41	7	30
GAR031300050918	Womble Creek	Flint	RV_11_17308	5.48	11	47
GAR031300051006	Tobler Creek	Flint	RV_11_17311	5.76	7	38
GAR031300051105	Flint River	Flint	RV_11_3501	5.68	18	62
GAR031300090201	Little Ichawaynochaway	Flint	RV_11_3807	5.34	9	48
GAR031300090301	Ichawaynochaway Creek	Flint	RV_11_3571	5.88	8	47
GAR031200020201	Bridge Creek	Ochlockonee	RV_10_3369	5.69	10	110
GAR031200030203	Attapulgus Creek	Ochlockonee	RV_10_3389	5.39	12	50
GAR030701030804	Bear Creek	Ocmulgee	RV_04_2058	5.48	19	54
GAR030701030709	Alcovy River	Ocmulgee	RV_04_2057	5.28	15	60
GAR030701030712	Bay Creek	Ocmulgee	RV_04_880	5.57	14	50
GAR030701030718	Tributary to Palm Creek	Ocmulgee	RV_04_17302	5.35	11	57
GAR030701031505	Echeconee Creek	Ocmulgee	RV_05_16777 RV_05_17305	5.49 5.29	17 23	45 67
GAR030701050207	Alligator Creek	Ocmulgee	RV_05_17317	5.05	<10	43
GAR030701010520	Hardeman Creek	Oconee	RV_03_16789	5.05	22	58
GAR030701011011	Indian Creek	Oconee	RV_03_16787	5.58	21	65
GAR030701011012	Turkey Creek	Oconee	RV_03_16788	5.80	19	55
GAR030701010807	Shoal Creek	Oconee	RV_03_17303	5.46	17	53
GAR030701010408	Curry Creek	Oconee	RV_03_706	5.74	31	96
GAR030701010214	Lollis Creek	Oconee	RV_03_678	5.67	31	124

AUID	Name	Basin	Station	Lowest pH	Average Alkalinity	Average Conductivity
GAR030701010316	Redstone Creek	Oconee	RV_03_707	5.68	14	40
GAR030701010506	West Fork Trail Creek	Oconee	RV_03_720	5.68	19	71
GAR030701010518	Cane Creek	Oconee	RV_03_16790	5.53	17	45
GAR030701010310	Barber Creek	Oconee	RV_03_782	4.90	12	50
GAR030602010310	Whetstone Creek	Ogeechee	RV_02_17290	5.87	12	61
GAR030601030410	Tributary to Van Creek	Savannah	RV_01_17294	5.84	16	75
GAR030601020113	Charlies Creek	Savannah	RV_01_244	5.62	<5	<10
GAR030601020104	Coleman River	Savannah	RV_01_248	5.65	<5	10
GAR031501080701	Indian Creek	Tallapoosa	RV_13_17328	5.81	10	44
GAR060200020105	Hiwassee River	Tennessee	RV_15_4931	5.28	12	12
GAR060200020501	Nottelly River	Tennessee	RV_15_4971	5.76	6	19
GAR031300050611	Tributary to Elkis Creek	Flint	RV_11_17313	5.42	27	80
GAR031300051503	Whitewater Creek	Flint	RV_11_17307	4.28	<1	18
GAR031200020504	West Branch Barnett Creek	Ochlockonee	RV_10_17320	5.82	25	100
GAR031300070205	Kinchafoonee Creek	Flint	RV_11_3538	5.72	9	33

Altamaha River in Category 3 below ITT Rayonier

GAR030701060402 - Altamaha River (ITT Rayonier to Penholoway Creek) was placed in Category 3 on the 2012 305b/303d list of waters. At the time, EPD was unable to make a determination as to whether the discharge from ITT Rayonier was causing an impairment of the designated use of Fishing. Since that time, work has been done to develop plans to conduct studies that will help determine if the designated use is being met. Currently 5 study plans (modules) are being or have been developed. The areas of focus of these studies involve 1) examining the impact of the discharge on the color of the River under two flow scenarios (low and average); 2) using Cormix to develop a mixing zone; 3) conducting a creel survey to determine if the discharge impacts where people fish; 4) conducting a mussel and fish survey to determine the health of aquatic life, and 5) looking at organoleptic factors as they pertain to the designated use of Fishing. Study plans for modules 1, 2 and 4 have been approved. Module 3 to

conduct the creel survey is being redesigned. The creel survey and Module 5 (the study of organoleptics) are interrelated. Module 1 has been completed for one flow scenario. Module 4 has been completed and the mussel and fish communities were found to be similar upstream and downstream from the mill. Once all the studies are completed, EPD will analyze the results and make a use assessment determination.

Other Waters in Category 3

There are various reasons why the remaining waters have been placed in Category 3. The most common reason is that while we had data that indicated that the water is “supporting” its use (such as fish tissue data, wastewater treatment plant effluent data, etc.), there is no instream water quality data available. Without having instream data, we decided to put the water in Category 3 instead of making the assessment that the waters were “supporting” their uses.

Waters in Category 2

A Water is placed in Category 2 if it has more than one designated use and if it is supporting at least one of its designated uses, but data is lacking to make an assessment of the other use(s). This Category was used for the first time in 2018 when one water was placed in Category 2. There are a couple of reasons that this category has been used infrequently in the past. First, the majority of waters in the State have only one designated use. In addition, the instream criteria that are in place to protect the different designated uses are for the most part the same for the different uses. That is because each of the designated uses (Fishing, Drinking Water, Recreation, etc.) have criteria in place to protect aquatic life; to protect human health when eating fish from the waters; and for primary and secondary contact recreation. The major differences in criteria between the different uses are that the Recreation use has criteria in place to protect primary contact recreation year-round while the other uses have criteria that protect for primary contact in the summer months and secondary contact in winter months. In addition, the Drinking Water use contains a more stringent criteria for arsenic. Since the criteria for the different uses are almost the same, generally if a water had more than one designated use then the assessment of the two uses was normally the same.

In 2020, EPD has begun to assign specific parameters to each of the designated uses when a water has multiple uses. The designated use “Fishing” protects aquatic life and people who are fishing or doing other types of secondary contact recreation. Parameters associated with the “Fishing” Use include dissolved oxygen, pH, temperature, metals, Bio F, Bio M, bacteria, etc. Bacteria and chlorophyll *a* are used to assess the designated use of “Recreation”. The Human Health Criteria, the drinking water criteria for arsenic, chlorophyll *a* and bacteria are used to assess the Drinking Water use. The main reason EPD is assigning parameters to specific uses is that U.S. EPA plans to release a new website called “How’s My Waterway” which will allow the public to interact with 305b/303d listing information along with other types of data (such as

water quality data). There are always challenges in presenting data from all of the different states on one platform as each state assesses its waters differently and has different designated uses. If Georgia did not make this change to how we assess our different uses, then our 305b/303d data on How's My Waterway would be misleading. For example, it would indicate that you should not swim in a water because there were excessive levels of PCBs in Fish Tissue. Excessive PCB in Fish Tissue is a reason to not eat fish caught in a water, but is not a reason to avoid swimming in a water.

One effect of splitting parameters between the uses is that more waters are being put into Category 2 on the 2020 list. The 2020 305b/303d list has 45 waters in Category 2. Often the water is being put in Category 2 because we only have data that relates to aquatic life. For example, we may only have Fish IBI data available for a stream. We can use this data to assess the designated use of "Fishing", but this type of data is not used to assess designated uses of "Recreation" or "Drinking Water". If the Fish IBI data indicated that the fish community was healthy (e.g. the site scored Fair, Good, or Excellent), then the Fishing Use would be assessed as "Supporting" its use, but the "Drinking Water" and "Recreation" uses could not be assessed and the water would be placed into Category 2 instead of Category 1.

One other important thing to be aware of is that if a water has multiple uses and one designated use is assessed as "Not Supporting" then the water is Impaired even if other use(s) are assessed as "Supporting" or "Assessment Pending". Therefore, splitting parameters between the different uses does not impact the overall assessment of the water and does not change any regulatory implication of a water being assessed as Impaired.