# Summary of Listing Decisions for the 2022 305b/303d List of Waters

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# **Summary of Listing Decisions**

The Georgia Environmental Protection Division (EPD) used its 2022 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 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 (DO) concentrations below the State's standard 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.

Reach ID Reach Name		Reach Location	Basin	
GAR030701070104	Cypress Creek	Cypress Creek Rolands Pond to Ohoopee River		
GAR030702010301	Red Bluff Creek	Little Red Bluff Creek to Satilla River East of Pearson	Satilla	
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	
GAR030702040602	Boone Creek	Upstream St. Marys River	St. Marys	
GAR030702040701	Corn House Creek	Headwaters to the St. Marys River	St. Marys	
GAR030702040901	St. Marys Trib. 5 (aka Cooner Branch)	Upstream St. Marys River	St. Marys	
GAR031101030102	Aucilla River	Masse Branch to Brooks County line near Boston	Ochlockonee	
GAR031102010103	Greasy Branch	U.S. Hwy. 84/SR 38 to Okeefenokee Swamp	Suwannee	
GAR031102010301	Suwannoochee Creek	Lees Bay to Suwannee River	Suwannee	
GAR031102010302	Suwannoochee Creek	Bear Branch to Lees Bay	Suwannee	
GAR031102020101	Double Run Creek	Tributary 0.4 mile upstream SR 90 to Alapaha River near Rebecca	Suwannee	
GAR031102020801	Fivemile Creek	Downstream Gaskins Pond to Big Creek near Nashville	Suwannee	
GAR031102020802	Tenmile Creek	Averys Millpond to Big Creek near Nashville	Suwannee	
GAR031102021202	Cow Creek	Headwaters to Alapaha River	Suwannee	
GAR031102040301	Warrior Creek	Rocky Creek to Ty Ty Creek near Norman Park	Suwannee	
GAR031200020102	Little Creek	Ga. Hwy. 37 to Ochlockonee River near Moultrie	Ochlockonee	
GAR031200020104	Ochlockonee River	Headwaters at Ga Hwy 112 near Sylvester to Bay Branch, East of Bridgeboro	Ochlockonee	
GAR031200020302	Big Creek	Woodhaven Rd. East of Coolidge to Ochlockonee River	Ochlockonee	
GAR031200020402	Big Creek	Headwaters to Little Creek near Meigs	Ochlockonee	

# Table 1 - Waters Determined to Have Naturally Low DO

Reach ID	Reach Name	Reach Location	Basin
GAR030701060503	Alex Creek	Mason Cowpen Branch to Altamaha River	Altamaha
GAR030701060311	Beards Creek	Headwaters to Blocker Creek	Altamaha
GAR030701060102	Cobb Creek	Oconee Creek to Altamaha River	Altamaha
GAR030701060405	Doctors Creek	Upstream Jones Creek	Altamaha
GAR030701070208	Flat Creek	Headwaters to Little Ohoopee River	Altamaha
GAR030701060302	Goose Creek	Upstream Rd. S1922 (Walton Griffis Rd.) to Little Goose Creek	Altamaha
GAR030701070209	Hurricane Branch	Pond 0.3 miles downstream Pringle Road to the Little Ohoopee River	Altamaha
GAR030701070303	Jacks Creek	U.S. Hwy. 1 to Ohoopee 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 Ohoopee River	Altamaha
GAR030701060407	Milliken Bay	Headwaters to Little McMillen Creek	Altamaha
GAR030701070105	Neels Creek	Bear Creek to Ohoopee River	Altamaha
GAR030701060103	Oconee Creek	Headwaters to Cobb Creek	Altamaha
GAR030701070501	Ohoopee River	Hwy 292 to Hwy 147	Altamaha
GAR030701070502	Ohoopee 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
GAR030701070408	Pendleton Creek	Headwaters to tributary 0.5 miles downstream U.S. 80	Altamaha
GAR030701070409	Pendleton Creek	Tributary 0.5 miles downstream U.S. 80 to tributary 0.2 miles downstream Anderson Pond Road	Altamaha
GAR030701060403	Penholoway Creek	Little Creek to Altamaha River	Altamaha
GAR030701070207	Sardis Creek	Headwaters to Little Ohoopee River	Altamaha
GAR030701060201	Ten Mile Creek	Little Ten Mile Creek to Altamaha River	Altamaha
GAR030701070506	Thomas Creek	Downstream CR203 to Ohoopee 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	
GAR030701060305	Watermelon Creek	Ditch Branch to the Altamaha River	Altamaha
GAR030701070306	Yam Grandy Creek	Tributary 1.1 miles upstream of County Road 175 to Crooked Creek	Altamaha

# Table 2 - Waters Determined to Have Naturally Low pH

Reach ID	Reach Name	Reach Location	Basin
GAR031300030314	Upatoi Creek	Heriot Creek to Armory Creek	Chattahoochee
GAR031300030315	Upatoi Creek	Armory Creek to the Chattahoochee River	Chattahoochee
GAR031300051313	Beaver Creek	Headwaters to Patsiliga Creek, Butler	Flint
GAR031300051411	Beaver Creek	Headwaters to Spring Creek	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
GAR031300051508	Sand Creek	Brooks Mill Pond to Cedar Creek	Flint
GAR031300051410	Spring Creek (formerly Avera Creek)	Headwaters to Beaver Creek	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
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 South Prong 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
GAR030701040815	Red Bluff 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	Tributary 270 feet upstream Norwood Stephens Road to Red Hill Creek	Oconee
GAR030701020411	Mikes Mill Creek	Headwaters to Sandy Hill Creek	Oconee
GAR030701021302	Ochwalkee Creek	Unnamed tributary 550 ft upstream Little New York Road to Oconee River	Oconee

Reach ID	Reach Name	Reach Location	Basin
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	Taylors 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	Iric Branch	Pond 0.5 miles downstream US 80 to Upper Black Creek	Ogeechee
GAR030602040208	Little Ogeechee River	Little Ogeechee Pond to 1.6 miles downstream 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
GAR030602030310	Lotts Creek	U.S. Hwy. 301 to Little Lotts Creek near Register	Ogeechee
GAR030602030312	Lotts Creek	Big Branch to Cypress Lake	Ogeechee
GAR030602030315	Lotts Creek	Little Lotts Creek to Reedy Branch	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 Ogeeche	
GAR030602040530	Mount Hope Creek	Raccoon Branch to Jerico River Ogeechee	

Reach ID	Reach Name	Reach Location	Basin
GAR030602020302	Nevills Creek	Bay Gull Creek to Ogeechee River near Rocky Ford	Ogeechee
GAR030602020201	Ogeechee Creek	Old Creek Road to the Ogeechee River near Oliver	Ogeechee
GAR030602020503	Pole Branch	Headwaters to Upper Black Creek	Ogeechee
GAR030602010302	Rocky Comfort Creek	Duhart Creek to Ogeechee River, Louisville	Ogeechee
GAR030602030505	Taylors Creek	Tributary 3.3 miles upstream GA 119 to Tributary 0.4 miles downstream GA 119, Fort Stewart"	Ogeechee
GAR030602030408	Tenmile Creek	Upstream Canoochee River, Excelsior	Ogeechee
GAR030602030318	Tributary to Little Lotts Creek	Headwaters to tributary 0.3 miles downstream Langston Chapel Road	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
GAR030602010511	Williamson Swamp Creek	Mays Millpond to Kittrell Creek	Ogeechee
GAR030702011003	Alabaha River	Hurricane Creek to Tan Trough Creek	Satilla
GAR030702011006	Alabaha River	Tan Trough Creek to Baxter Branch	Satilla
GAR030702011007	Alabaha River	Baxter Branch to the 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 Creek	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
GAR030702020203	Blackwater Creek	Headwaters to Sweetwater 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
GAR030702011212	Bullhead Creek	Tributary 1.3 miles upstream GA 110 to the Satilla River	Satilla
GAR030702020301	Colemans Creek	Dry Branch South of Surrency to Big Satilla Creek near Screven	Satilla

Reach ID	Reach Name	Reach Location	Basin
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 tributary 1.1 miles downstream Little Creek	Satilla
GAR030702010803	Hurricane Creek	Tributary near Sunflower Road to Fox Branch	Satilla
GAR030702011001	Hurricane Creek	Tributary 1.1 miles downstream Little Creek to Briar Creek near Alma	Satilla
GAR030702010711	Kettle Creek	Tuten Creek 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
GAR030702011213	Rose Creek	Headwaters to the Satilla River	Satilla
GAR030702010102	Satilla Creek	Hunters Creek East of Ocilla to Satilla River	Satilla
GAR030702010103	Satilla Creek	Dorminy Lake to tributary 490 feet upstream of Quail Hollow Road	Satilla
GAR030702010204	Satilla River	Reedy Creek to Indian Creek	Satilla
GAR030702010302	Satilla River	Pudding Creek to Smut Branch near Satilla   Pearson Satilla	

Reach ID	Reach Name	Reach Location	Basin	
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	
GAR030702020202	Sweetwater Creek	Headwaters to Black Water Creek	Satilla	
GAR030702020206	Sweetwater Creek	Tributary 0.8 miles down Red Oak Rd to Big Satilla Creek near Baxley	Satilla	
GAR030702020505	Tributary #1 to Sixty- foot Branch	Headwaters to Sixty-foot Branch	Satilla	
GAR030702010305	Tributary to Little Red Bluff Creek	Albany Avenue West to Little Red Bluff Creek	Satilla	
GAR030702020411	Tributary to Little Satilla Creek	Headwaters to Little Satilla Creek	Satilla	
GAR030702011005	Tributary to the Alabaha River	100 feet upstream Grady Road to the Alabaha River	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	Phinizy Ditch to Savannah River, Augusta	Savannah	
GAR030601060311	Chicken Branch	Headwaters to Spirit Creek	Savannah	
GAR030601090205	Cowpen Branch	Headwaters to Runs Branch	Savannah	
GAR030601090209	Devils Branch	Headwaters to Runs Branch	Savannah	
GAR030601090203	Ebenezer Creek	Long Bridge Road 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	
GAR030601060309	Little Spirit Creek	Headwaters to Spirit Creek	Savannah	
GAR030601090311	Lockner Creek	Polly Creek to the Savannah River Savannah		

Reach ID	Reach Name	Reach Location	Basin
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
GAR030601060308	Spirit Creek	McDade Pond to Savannah River	Savannah
GAR030601090308	St. Augustine Creek	Walthour Swamp (2.5 miles u/s I-95) to Front River near Port Wentworth	Savannah
GAR030601080103	Sweetwater Creek	Headwaters to Brier Creek	Savannah
GAR030601090207	Turkey Branch	Headwaters to Runs Branch	Savannah
GAR030702040602	Boone Creek	Upstream St. Marys River	St. Marys
GAR030702040914	Casey Creek	Miller Branch to St. Marys River	St. Marys
GAR030702040912	Catfish Creek	May Branch to the St. Marys River	St. Marys
GAR030702040305	Clay Branch	Headwaters to Spanish Creek	St. Marys
GAR030702040701	Corn House Creek	Headwaters to the St. Marys River	St. Marys
GAR030702040804	Hatchers Branch	Headwaters to Spanish Creek	St. Marys
GAR030702040909	Horsepen Creek (aka Temple Creek)	Temple Creek to the St. Marys River	St. Marys
GAR030702040913	Miller Branch	Casey Creek to the St. Marys River	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
GAR030702040911	St. Marys Cut East Branch	Riley Creek to the St. Marys River	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

Reach ID	Reach Name	Reach Location	Basin
GAR031102030405	Bear Creek	Upstream Giddons Mill Creek to downstream Ga. Hwy. 37/76, Adel	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
GAR031102010107	Black River	Tom Thumb Creek to Alligator Creek	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
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
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

Reach ID	Reach Name Reach Location		Basin
GAR031102030708	Piscola Creek	Dry Lake Creek to Allen Branch	Suwannee
GAR031102030702	Pride 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
GAR031102010204	Tatum Creek	Tributary 0.3 miles upstream Tower Road to Dry Branch	Suwannee
GAR031102010203	Tatum Creek (formerly Jones Creek)	Dry Branch to the Suwannee River	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 Withlacoochee River #2	Headwaters to Withlacoochee River	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	Withlacoochee River	Headwaters (Cypress Creek) to New River	Suwannee
GAR031102010108	Woodyard Creek	Tributary 400 feet downstream US 84 to Surveyors Creek	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 2022 list of waters has 238 waters in Category 3. There are an additional 173 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 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 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 ongoing. In addition, EPD is currently working on revising the taxa list and tolerance values that 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 2022 305(b)/303(d) List of Waters has 49 waters in Category 3 based on sites that have a narrative rank of "fair" for macroinvertebrate sampling. There are an additional 24 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 111 waters are in Category 3 for DO while EPD works to determine the "natural DO" concentration for the water. There are an additional 73 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 DO.

#### 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. EPD put 52 waters in Category 3 (Assessment Pending) on the 2020 305(b)/303(d) List for pH. The waters were put

into Category 3 because EPD believes that our pH probes may have been providing inaccurately low values, especially in waters where the conductivity is low. In addition, EPD believes 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 then this situation does not constitute a violation of water quality standards. These two factors are discussed in more detail below. EPD has placed these waters in Category 3 for pH while we determine 1) if the low pH readings 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. Below is the rationale why we believe our pH meters may sometimes be providing falsely low values; what we are doing to improve accuracy of pH measurements; and why we think some low pH may be natural.

#### Questions about Probe Accuracy and Steps Taken to Improve 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) then the pH reading is often up to a half a Standard Unit (SU) 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 SU difference is enough to move many of our pH readings that are 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 measured in the field

Beginning in spring 2020, EPD implemented a new methodology for measuring pH to improve accuracy. If the in-situ pH was measured to be less than 6.0 SU and the water was not a blackwater stream where low pH is expected, then water was collected in a bucket and the pH of the water was measured in the bucket. This was done because when the pH of low conductivity water is measured, a high junction potential between the low conductivity stream water and the solution inside the pH meter can result in inaccurate measurements. Measuring the pH in a bucket where the water is not flowing decreases the problem with the junction potential. In addition, EPD has ordered some new pH meters we hope will be able to more accurately measure pH in low conductivity waters. These new meters were not in use when data was collected for the 2022 305(b)/303(d) List.

EPD was able to assess 13 waters that had previously been placed in Category 3 for pH based on new data for the 2022 305(b)/303(d) List. Eleven of the waters were moved from Category 3 to

Category 1 for pH and two were moved from Category 3 to Category 5 for pH. In addition, 37 waters were placed into Category 3 due to pH (see the table at the end of this section). Most of these waters were sampled in 2019 before the new methodology for measuring pH was implemented, and we want to collect additional data using the new method and/or the new pH probes before determining whether the pH criteria are being met. Finally, EPD added pH as an impairment to 18 waters

# 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 waters 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 area 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 a 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 that 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). EPD will continue to investigate whether some of the observed low pH is a natural condition. This effort will take longer than collecting more data where we believe our pH probes may have been providing inaccurate data.

AUID	AUNAME	AULOCATION	BASIN	COUNTY
GAR031300020608	Hillabahatchee Creek	Tollieson Branch to West Point Lake	Chattahoochee	Heard
GAR031300031406	Hodchodkee Creek	Bladen Creek to Smithee Jack Creek	Chattahoochee	Quitman
GAR031300040102	Hog Creek	Headwaters to Cemochechobee Creek	Chattahoochee	Randolph, Clay
GAR031300020338	Little Anneewakee Creek	Headwaters to I-20	Chattahoochee	Douglas
GAR031300010512	Tate Creek	Headwaters to Chestatee River	Chattahoochee	Lumpkin
GAR031300021220	Tributary to Mulberry Creek	Headwaters to Oak View Home WPCP	Chattahoochee	Harris

## Waters Added to Category 3 for pH in 2022

AUID	AUNAME	AULOCATION	BASIN	COUNTY
GAR031300020427	Tributary to Snake Creek	Headwaters to Snake Creek (Newnan)	Chattahoochee	Coweta
GAR031300020321	Wolf Creek	Headwaters to Chattahoochee River	Chattahoochee	Douglas, Carroll
GAR031501041409	Dry Creek	Headwaters to Euharlee Creek	Coosa	Bartow, Polk, Paulding
GAR031501040312	Etowah River	Amicalola Creek to Yellow Creek	Coosa	Dawson
GAR031501040313	Etowah River	Yellow River to Brewton Creek	Coosa	Dawson, Forsyth
GAR031300060801	Abrams Creek	Little Abrams Creek to the Flint River	Flint	Worth
GAR031300060204	Buck Creek	Gin Creek to Blackshear Branch	Flint	Marion, Schley
GAR031300060201	Buck Creek	Fox Branch to Flint River near Oglethorpe	Flint	Schley, Macon
GAR031300060102	Camp Creek	Triple Creek to Flint River, Oglethorpe	Flint	Macon
GAR031300100705	Fishpond Drain	Wash Pond to Lake Seminole	Flint	Seminole
GAR031300050511	Kennel Creek	Headwaters to Walnut Creek	Flint	Meriwether
GAR031300070201	Lanahassee Creek	W. Fork Lanahassee Creek to Kinchafoonee Creek	Flint	Webster
GAR031300060205	Oochee Creek	700 feet upstream Dr. Deryl Hart Road to Blackshear Branch	Flint	Marion
GAR031300050217	Tar Creek	Wright Lake to Four Seasons Mobile Home Park	Flint	Fayette
GAR031300050614	Town Branch	Headwater to Zebulon WPCP	Flint	Pike
GAR031300050406	Tributary to Birch Creek	Headwaters to Concord North WPCP	Flint	Pike
GAR031300050612	Tributary to Elkins Creek	Headwaters to tributary 0.8 miles upstream Fossett Road	Flint	Pike
GAR031300050613	Tributary to Elkins Creek	Headwaters to Elkins Creek in Molena	Flint	Pike

AUID	AUNAME	AULOCATION	BASIN	COUNTY
GAR031300060904	Tributary to Mill Creek	Headwaters to tributary 0.5 miles downstream Fowler Road	Flint	Worth
GAR031300050219	Tributary to Pelham Creek	Lake Victor to Marnelle Mobile Home Estates	Flint	Fayette
GAR031300050509	Walnut Creek	Meriwether County	Flint	Meriwether
GAR031300050307	White Oak Creek	Little White Oak Creek to Flint River near Alvaton	Flint	Meriwether
GAR030701040804	Sturgeon Creek	Dickson Mill Creek to Ocmulgee River	Ocmulgee	Ben Hill
GAR030701031317	Tributary to Hurricane Creek	Headwaters to Hurricane Creek	Ocmulgee	Jones
GAR030602010201	Little Ogeechee River	Two Mile Creek to Hamburg Mill Pond near Culverton	Ogeechee	Hancock, Washington
GAR030601020211	Scott Creek	Headwaters to Stekoa Creek	Savannah	Rabun
GAR031102040405	Big Branch	Headwaters to Sumner Lake	Suwannee	Cook
GAR031501080106	Swinney Branch	Headwaters to Tallapoosa River	Tallapoosa	Haralson, Polk
GAR060200020530	Nottely River	Allison Branch to US Hwy 19/129	Tennessee	Union
GAR060200020601	Nottely River	Downstream Lake Nottely	Tennessee	Union
GAR060200030220	Tributary to Dickey Mill Creek	Headwaters to Dickey Mill Creek	Tennessee	Fannin

## Assessment of Rayonier Discharge on the Altamaha River

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 due Georgia's narrative criteria. Since that time, work has been completed on five study plans (modules) that focused on 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. Module 1 evaluated the effluent color and its mixing as it flows downstream under critical "low" flow (1,500 cfs) and "normal" higher flow (6,700-7,400 cfs) conditions. Under both flow conditions, 5 feet downstream from Outfall 1, which is a single port diffuser, a narrow plume was observed hugging the right bank looking downstream. Within 50 feet, the plume hit the right bank and extended slightly across the channel toward the left bank. Approximately 250 feet downstream from Outfall 1, the discharge plume was approximately halfway across the channel. The discharge plume appeared to be completely mixed horizontally by the time it reached the railroad bridge approximately 0.2 miles downstream from Outfall 1. Under both flow conditions, there seemed to be little to no increase in the river color above background levels. The discharge from Outfall 2, which is a multiple port diffuser, was not visible near the outfall and appeared at the surface approximately 250 feet downstream from the outfall. Five hundred feet downstream from the outfall, the discharge plume was observed at the right bank and near the left bank but was not yet completely mixed horizontally. Under "low" flow conditions, the discharge plume was completely mixed horizontally from bank to bank between 0.75 and 1 mile downstream from Outfall 2. Under "normal" flow conditions, it appears it took slightly over a mile for the plume to completely mix from bank to bank. The instream color levels increased approximately 15% downstream from Outfall 2 under "normal" flow conditions and tripled under "low" flow conditions. However, based on the field study results, instream color during "normal" flow conditions was approximate four times the instream color during "low" conditions. This was probably due to the inundation of the flood plain during higher flow conditions since the river was deeper and wider during "normal" flow conditions. Under both flow conditions, the color in Penholoway Creek, a tributary downstream from both outfalls, was approximately two and a half times the background color levels measured in the Altamaha River upstream of the outfalls.

Module 2 used the model CORMIX to determine the effluent mixing zone from the Rayonier outfalls under "low" flow and "normal" flow conditions. The Module 2 Report states that under "low" flow conditions, CORMIX was able to accurately model the centerline concentrations for both outfalls. Using specific conductance as the pollutant of concern, CORMIX seemed to model Outfall 1 plume locations and widths reasonably well, which discharges into a relatively straight channel. However, the Outfall 2 modeled plume locations and widths did not appear to closely match the measured data. This may be due to the fact that the main channel tends lies on the right side of the river at the discharge and then move to the left bank. Under "normal" flow conditions, CORMIX model results did not match the near field measured centerline concentrations for either outfall; however, the far field model results (100-200 feet downstream of the outfalls) did match the measured field data well. Again, the modeled plume locations and widths matched well for Outfall 1, but not for Outfall 2.

Module 3 surveyed the local population to determine if the Rayonier discharge is impacting the use of the river. Data was gathered on frequency of use, activities participated in, whether fish caught were consumed, and where people used the Altamaha River. Approximately 62% of the

surveys were mailed to the general population. The rest of the surveys involved interviewing users at various boat launches. A quarter of the people who responded to the mailed survey said they did not use the River and none of them stated that the reason they did not use it was due to the Rayonier discharge. Most either did not recreate in or on water, used another river or lake that was closer, preferred the ocean, were too old, or didn't have a boat. Almost a third of the people who responded to the mailed survey used the Altamaha River once or twice a month or every few months and nearly a fifth of the respondents visited the river weekly. For those who did use the Altamaha River, most people enjoyed the fishing, natural beauty, and peacefulness of the river. The primary uses of the river were fishing and boating, followed by swimming, camping, and picnicking. Most respondents go fishing and the fish they catch are consumed. Jaycee Landing, the boat ramp just upstream of the Rayonier Mill is the most used boat ramp on the Altamaha River. There was no difference in the perceived use of the Altamaha River upstream or downstream of Jaycee Landing. Over half of the people had nothing negative to say about the river. Things people disliked about the river were trash, lack of access and amenities, and natural hazardous (bugs, snakes, alligators, shallow water, high water). A few respondents did mention the presence of the Mill, but this did not seem to cause them not to use the river.

Module 4 evaluated the condition of the fish and mussel communities in the Altamaha River upstream and downstream from the Rayonier outfalls. Georgia's Wildlife Resources Division's (WRD) historic fish data from sampling sites located upstream and downstream from the discharge were examined. Of the fourteen fish historically found in the Altamaha River, ten fish species were more abundant at the downstream site and four species were more abundant at the upstream site. The 2018 WRD fish data found of the twelve fish species collected, three were more abundant at the downstream site, and eight species were more abundant at the upstream site. Generally, the fish conditions were higher at the downstream locations than the upstream. A review of the WRD's historic mussel data from the Altamaha River included 15 species collected over the period from 1993 to 2011. In 2019, a mussel survey was performed at fourteen sites: five sites upstream from the discharge, four sites between the two Rayonier outfalls, and five sites downstream from the outfalls. Mussel communities were found to be similar in all three reaches. Abundance increased from upstream to downstream. The findings indicate there is no significant difference in the fish and mussel communities upstream and downstream from the Rayonier's wastewater outfalls.

Module 5 looked at compounds in water and fish tissue samples collected upstream and downstream from the Rayonier's outfalls associated with organoleptic effects. Water samples were collected under "normal" flow conditions and analyzed for all the organoleptic compounds. Organoleptic compounds were found in concentrations below the National USEPA Criteria for Organoleptic Effects (taste and order) and in some cases were below the detection limits. Previous fish tissue analysis indicated there were only two organoleptic compounds of concern so the fish tissue samples were only analyzed for phenol and copper. The targeted fish sampled included channel catfish, redbreast sunfish, and largemouth bass. Bluegill sunfish were added to

the sampling effort since not enough redbreast sunfish could be collected. The copper concentrations in the fish tissue samples collected upstream and downstream from the Rayonier outfalls were 1.56 mg/kg and 1.16 mg/kg, respectively. There were three fish tissue sampled collected upstream from the Rayonier outfalls that had levels below the minimum reporting limit, but above the minimum detection limit, all other samples including all downstream samples were non-detect.

Georgia's Water Quality Control Act charges EPD with the responsibility to establish and maintain the quality and quantity of GA's water resources. The Act states "It is Georgia's policy that water resources be utilized prudently for the maximum benefit of the people, in order to restore and maintain a reasonable degree of purity in the waters and an adequate water supply, and to require, where necessary, reasonable usage of the State waters and reasonable treatment of sewage, industrial wastes, and other wastes prior to their discharge into the State waters." Using the Act as a guide, EPD assessment of the results from the 5 study plans is that the Altamaha River downstream from the Mill meets the narrative water quality criteria.

#### 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). 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." 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 has released a new website called "How's My Waterway" that allows the public to interact with 305(b)/303(d) 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 305(b)/303(d) 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.

The 2022 305(b)/303(d) List has 38 waters in Category 2. Often the water is 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 is healthy (e.g., the site scored "Fair," "Good," or "Excellent"), then the Fishing use is assessed as "Supporting" its use, but the "Drinking Water" and "Recreation" uses cannot be assessed and the water is 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.