Highlights of the Draft 2024 305(b)/303(d) List of Waters

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Summary of Waters

3,092 waters are included in the 2024 305(b)/303(d) List of Waters

- 1,180 Supporting
 - o 5,638 miles streams and coastal streams
 - o 118,771 acres lakes
 - o 26.2 miles coastal beaches
 - o 2.07 miles of freshwater beaches
 - o 15 square miles sounds/harbors
- 1,637 Not Supporting (aka Impaired)
 - o 10,905 miles streams and coastal streams
 - o 261.882 acres lakes
 - o 11.3 miles of coastal beaches
 - o 0.2 miles freshwater beaches
 - o 24 square miles sounds/harbors
- 275 Assessment Pending
 - o 1,338 miles streams and coastal streams
 - o 10,582 acres lakes
 - o 50 square miles sounds/harbors

New data was received and assessed for 654 waters (including waters that have been assessed in the past and waters assessed and added to the 305(b)/303(d) List of Waters for the first time in 2024).

61 new waters were added to the 2024 305(b)/303(d) List of Waters

- 20 Supporting
- 26 Not Supporting
- 15 Assessment Pending

<u>Changing Listings from "Fecal Coliform" to "E coli", "Enterococci", or "Bacteria" based on the Adoption of New Bacteria Criteria</u>

As part of the 2019 Triennial Review, Georgia adopted *E. coli* and enterococci criteria for waters designated as fishing, coastal fishing, and drinking water. These new criteria replaced the previous Fecal Coliform (FC) criteria. The new bacteria criteria were approved by U.S. EPA on August 31, 2022. EPD developed a <u>Bacteria Strategy</u> that describes how EPD is implementing

the new criteria including how the adoption of the new criteria impacts the 305(b)/303(d) List of Waters.

Starting with the 2024 305(b)/303(d) List of Waters, FC data will no longer be used to assess waters except in the case of assessing waters designated as shellfish growing areas on the coast. This is because FC is used as the bacteria criteria under the National Shellfish Sanitation Program administered by the U.S. Food and Drug Administration. The 2024 305(b)/303(d) List of Waters still has 3 waters listed as impaired for FC based on requirements for waters in a Shellfish Growing Area.

There were a little over 800 waters listed as impaired for FC on the 2022 305(b)/303(d) List of Waters. Since Georgia no longer has FC criteria, these listings needed to be updated to reflect the new criteria. The paragraphs below describe how these listings were updated based on our access to new or historical *E. coli* or enterococci data.

- If there was no recent or historical *E. coli* or enterococci data to assess, the listing for "FC" was changed to "Bacteria". EPD has plans to return to all waters listed for "Bacteria" in the future to collect *E. coli* or enterococci data. On future 305(b)/303(d) Lists of Waters, EPD will use these data to change the "Bacteria" listing to "E coli" or "Enterococci" if the data do not meet the current criteria, or if the data indicated that the water was meeting the E. coli or enterococci criteria, then FC would be removed as an impairment..
- In cases where EPD had access to *E. coli* or enterococci data collected in 2022 or 2023 (after the new criteria were adopted), then these data were assessed as described in Georgia's 2024 Listing Assessment Methodology. If the data indicated that the *E. coli* or enterococci criteria were impaired, then the FC listing would be changed to "E coli" or "Enterococci". If the data indicated that the water was meeting the *E. coli* or enterococci criteria, then FC was removed as an impairment.
- EPD had collected some *E. coli* and enterococci data prior to 2022. Historical *E. coli* and enterococci data were used in a more limited fashion. If a water was listed as impaired for FC on the 2022 305(b)/303(d) list and we had historic *E. coli* or enterococci data that did not meet the new *E. coli* or enterococci criteria, then the FC listing was changed to "E coli" or "Enterococci"; otherwise, the FC listing was changed to "Bacteria". EPD has plans to return to all waters listed for "Bacteria" in the future to collect *E. coli* or enterococci data. EPD will use these data to change the "Bacteria" listing to "E coli" or "Enterococci" if the data do not meet the criteria, or if the data indicated that the water was meeting the E. coli or enterococci criteria, then FC would be removed as an impairment.

Pollutants Removed

- Ammonia Toxicity removed from 6 waters
- Bacteria (E. coli, Enterococci, FC) removed from 10 waters
- Bio F removed from 2 waters
- DO removed from 15 waters
- Fish Tissue Impairments (other than mercury) removed from 4 waters
- Fish Tissue (Mercury) removed from 6 waters
- Metals removed from 2 waters (Copper)
- pH removed from 12 waters
- Temperature removed from 1 water

Pollutants Added

- Algae added to 2 waters
- Ammonia Toxicity added to 2 waters
- Bacteria (E. coli, Enterococci, "Bacteria") added to 79 waters
- Bio F added to 5 waters
- Chlorophyll *a* added to 2 waters
- DO added to 12 waters
- FC added to 1 water (based on shellfish criteria)
- Fish Tissue Impairments (other than for mercury) added to 33 waters
- Fish Tissue (Mercury) added to 3 waters
- Metal (or Metalloids) Arsenic, Cadmium, Copper, Lead, Nickel, Selenium or Zinc added to 11 waters
- pH added to 1 water

Parameters Added to Category 3 (more data/information needed to make an assessment)

- Bacteria was added to Category 3 for 1 water
- Bio M was added to Category 3 for 1 water
- Chlorophyll a was added to Category 3 for 3 waters
- DO was added to Category 3 for 20 waters
- Fish Tissue (Mercury) was added to Category 3 for 5 waters
- pH was added to Category 3 for 23 waters

Changes to Assessment of Lakes for Chlorophyll a and Nutrients

Site-specific numeric criteria have been established for 8 major lakes in Georgia including 1) West Point Lake, 2) Lake Walter F. George, 3) Lake Jackson, 4) Lake Allatoona, 5) Lake Sidney Lanier 6) Carters Lake, 7) Lake Oconee and 8) Lake Sinclair. The criteria for these lakes can be found at Georgia's Rules and Regulations for Water Quality Control – Chapter 391-3-6-.03(17).

The growing season average of Chlorophyll *a* (average of chlorophyll *a* data from April — October) was calculated each year from 2019-2023. If the growing season average exceeded the site-specific growing season criteria 2 (or more) out of the last 5 years, the lake area representative for that station is assessed as Not Supporting its designated uses (assigned to Category 4a or 5). If the average exceeds the site-specific growing season criteria for 1 out of last 5 years, the waterbody is assigned to Category 3 (Assessment Pending). If the growing season average meets the site-specific growing season criteria all 5 years, the waterbody is assessed as Supporting its designated uses (assigned to Category 1).

- Lake Jackson
 - 1 section (Tussahaw Creek, South River, Yellow River, and Alcovy River Arms) moved from Category 3 (Assessment Pending) to Category 5 (Not Supporting) for chlorophyll a
- o Lake Allatoona
 - 1 section (Dam Pool) moved from Category 3 (Assessment Pending) to Category
 4a (Not Supporting) for chlorophyll a
- West Point Lake
 - The lake was moved from Category 1 to Category 3 (Assessment Pending) for chlorophyll *a*.
- o Lake Oconee was Assessed for chlorophyll *a* for the first time. The newly adopted chlorophyll *a* criteria went into effect in 2022. The lake was also broken into 3 sections based on the compliance monitoring locations established in the water quality criteria.
 - o All three sections (Richland Creek Arm, Oconee River Arm, and Dam Pool) were placed in Category 1 (Supporting) based on data from 2022 and 2023.
- Lake Sinclair was Assessed for chlorophyll a for the first time. The newly adopted chlorophyll a criteria went into effect in 2022. The lake segment (Entire lake except 650 acre portion at intersection of Putnam, Baldwin and Hancock Counties) was broken into 3 sections based on the compliance monitoring locations established in the water quality criteria.
 - 2 sections of the lake (Oconee River Arm) and (Dam Pool) were placed in Category 3 (Assessment Pending) for chlorophyll a based on data from 2022 and 2023.
 - o 1 section of the lake (Murder Creek/Little River Arms) was placed in Category 1 (Supporting) for chlorophyll *a* based data from 2022 and 2023.

Changes Made to the Assessment of Recreational Waters for Bacteria

- Enterococci was added to:
 - o Saint Simons Island Middle Beach (aka East Beach Old Coast Guard Station)
 - Saint Simons Island 5th Street Crossover Beach
 - o Saint Simons Island North Beach at Goulds Inlet
 - o Tybee Island Polk Street Beach
 - o Tybee Island Strand Beach at Pier
- *E coli* was added to:
 - o Chattooga River (West Fork Chattooga River to Lake Tugaloo)

- o Tobesofkee Creek(GA Hwy 74 to Lake Tobesofkee)
- o Chattahoochee River (Headwaters to Jasus Creek)
- o Chattahoochee River (Jasus Creek to Ga. Hwy. 17 (near Ber Weg Rd), Helen)
- o Chattahoochee River (Buford Dam to James Creek)
- o Chattahoochee River (Snake Creek to Wahoo Creek)
- o Chattahoochee River (Wahoo Creek to Yellowdirt Creek)
- o Chattahoochee River (Ga Hwy 91 to Lake Seminole)
- o Toccoa River (Headwaters to Big Creek)
- E. coli was moved from Category 3 to Category 1 for:
 - o Toccoa River (Lake Blue Ridge to Curtis Switch Road)
- *E. coli* was removed from:
 - West Point Lake

Temperature Removed from the Coosa River

GAR031501050209 – Coosa River (Beech Creek to Stateline) has been listed as being impaired for Temperature since 2008. The elevated water temperature was due to cooling water discharges from Plant Hammond. The plant was retired in 2019. An evaluation of daily maximum temperature data collected between 2018 and June 2023 at the USGS gage on the Coosa River at the Alabama/Georgia line was conducted. During the critical period of May – October, the temperature of the River exceeded the criteria on 7 days. There were about 960 days during the critical period of May 2018-June 2023. The exceedance rate is therefore less than 10%, so Temperature has been removed as an impairment.

Corrections made to River Basins

• The River Basin for GAR030602040623 – Doboy Sound was corrected from the Altamaha River Basin to the Ogeechee River Basin.

Changes made to Fish Tissue Listings

Fish Tissue Impairments Added and Removed from the 2024 305(b)/303(d) List of Waters

| | Number of Impairments | Number of Impairments |
|-----------------------|------------------------------|------------------------------|
| Fish Tissue Parameter | added to the 2024 | Removed from the 2024 |
| | 305(b)/303(d) List of Waters | 305(b)/303(d) List of Waters |
| Mercury | 3 | 11 |
| PCBs | 33 | 0 |
| Selenium | 0 | 1 |
| Thallium | 13 | 3 |
| Toxaphene | 1 | 0 |

Changes Made to Waterbody Segment Names/Locations and Sizes in 2024

If you are having trouble locating a stream segment on the 2024 305(b)/303(d) List of Waters that was on the 2022 305(b)/303(d) List of Waters, it may be because the Stream Name and/or Location information was changed. Changes were made to a number of Stream Names (i.e. Reach Names) and Stream Locations (i.e. Reach Locations) on the 2024 305(b)/303d) List of Waters. There are two main reasons for these changes. First, the stream segment may have been split into two or more pieces. In the case of stream segments that are split, the Reach ID for the stream segments also changes. The second reason for the change to Steam Names and Locations is because EPD revised the geospatial (GIS) coverage of many assessed streams and this sometimes also resulted in our changing the stream name or location information. In these cases, the Reach ID of the assessed stream was not changed. More detailed information about changes made based on splits or based on changes to GIS coverage is provided below. An Excel file "ChangesToWaterNamesLocationsGIS_2024305b303d" can be found on the Water Quality in Georgia webpage in the section with the 2024 305(b)/303(d) documents. This file contains tables of waters whose IDs, Names, Locations, or GIS coverages have been updated.

Stream/Lake Segments Split into Two or More Pieces

49 stream/lake segments were split into two or more pieces on the 2024 305(b)/303(d) List of Waters. Stream/Lake segments are typically split when there is more than one monitoring location on the waterbody and data from the different monitoring locations lead to different assessment results. For instance, if a stream segment has two monitoring locations and the upstream monitoring location indicates the stream is impaired for copper, but the downstream monitoring location shows the copper criteria are being met, then the stream segment will be split so the upstream portion of the stream is listed as impaired for copper while the downstream segment is not listed as impaired for copper.

In addition to splitting a water body based on differences in water quality, EPD also split stream segments based on changes in Designated Uses. Each water on the 305(b)/303(d) List of Waters has one or more designated uses assigned to it (e.g. Fishing, Recreation, Drinking Water, etc.). These Designated Uses are assigned to waters in Chapter 3913-6-.03 of the Rules and Regulations for Water Quality Control. The designated use of a number of waters was changed as part of the 2019 Triennial Review. Specifically, the designated use of Recreation was added to a number of waters. These changes were approved by U.S. EPA on August 31, 2022 and designated uses of waters on the 2024 305(b)/303(d) List of Waters have been updated accordingly. There were multiple cases where the new Recreation use only applied to a portion of a water on the 2022 305(b)/303(d) List of Waters. For example, a Recreation use was added to the South River between Honey Creek and Lake Jackson as part of the 2019 Triennial Review. The 2022 305(b)/303(d) List of Waters contained a listing for the South River from (Pole Bridge Creek to Hwy 20). Honey Creek is located between Pole Bridge Creek and Hwy 20. This means the new Recreation use only applies to a portion of this listed water. Therefore, in 2024, this section of the South River was split into two sections (Pole Bride to Honey Creek) and (Honey Creek to Hwy 20) and the Recreation use was assigned to the (Honey Creek to Hwy 20) portion of the River.

Corrections Made to GIS coverages and Updates made to the Reach Names, Locations, and Sizes of Assessed Waters

The geospatial (GIS) coverage of the 305(b)/303(d) List of Waters has been compiled over many years beginning around 2002. Once a coverage was created, it was not changed unless the water was split into multiple segments as described above, or it was determined the GIS was incorrect. New GIS coverages were created and added to the existing coverage each listing cycle. Over the years, different source layers were used to create shapefiles for the streams, lakes and other waterbodies that have been assessed. To improve the accuracy of its GIS coverage, Georgia began the process of redrawing the GIS segments for assessed waters using the most recent version of the National Hydrography Dataset (NHD) (1:24,000) resolution. This process began when the 2022 305(b)/303(d) List of Waters was being developed. The GIS coverages of 642 waters were updated in 2022 listing cycle. Updating the GIS coverages is a time-consuming process, and we were not able to complete the effort in 2022 so the process continued in 2024. The GIS coverages -over 1,200 waters were redrawn for the 2024 305(b)/303(d) List of Waters.

In some cases, it was determined the name of a stream we had on the 305(b)/303(d) List of Waters did not match the name of the stream given in NHD. It is not unusual for different maps to give the same body of water different names. To be consistent, stream names are being changed to match names in NHD. In addition, the location information for an assessed stream was sometimes changed to reflect the assessed section of the water more accurately. Reach Locations were sometimes vague (for instance the Reach Location may have just said "Tributary to Yellow River", but it did not specify where the assessed portion started). In these cases, location information was sometimes updated to provide a more accurate description of the assessed water.

In some casesthe GIS coverage was also updated in other ways. For instances where the old GIS coverage may not have matched the narrative location description EPD took this opportunity to fix the GIS coverage. For example, the location information may have said that the assessed water started at State Route 1, but the GIS coverage started upstream of State Route 1.

Recalculating Sizes to nearest Tenth of a Mile for Streams

In the past the length of stream segments was reported to the nearest whole number. We began to report the length of streams to the nearest tenth of a mile on the 2022 305(b)/303(d) List of Waters. This only impacted streams assessed for the first time or streams whose GIS was redrawn using the most recent version of NHD as described above. All stream mileages were recalculated for the 2024 305(b)/303(d) List so that they are now reported to the nearest tenth of a mile.