391-3-6-.03 Water Use Classifications and Water Quality Standards.*

(1) **Purpose.** The establishment of water quality standards.

(2) Water Quality Enhancement:

- (a) The purposes and intent of the State in establishing Water Quality Standards are to provide enhancement of water quality and prevention of pollution; to protect the public health or welfare in accordance with the public interest for drinking water supplies, conservation of fish, wildlife and other beneficial aquatic life, and agricultural, industrial, recreational, and other reasonable and necessary uses and to maintain and improve the biological integrity of the waters of the State.
- (b)(i) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
- (ii) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the division finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the division's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the division shall assure water quality adequate to protect existing uses fully. Further, the division shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
- (c) Outstanding National Resource Waters (ONRW). This designation will be considered for an outstanding national resource waters, such as waters of National or State parks and wildlife refuges and waters of exceptional recreational or ecological significance. For waters designated as ONRW, existing water quality shall be maintained and protected.
- (i) No new point source discharges or increases in the discharge of pollutants above permitted level from existing point source discharges to ONRW shall be allowed.
- (ii) Existing point source discharges to ONRW shall be allowed, provided they are treated or controlled in accordance with applicable laws and regulations.
- (iii) New point source discharges or expansions of existing point source discharges to waters upstream of, or tributary to, NRW shall be regulated in accordance with applicable laws and regulations, including compliance with water quality criteria for the use classification applicable to the particular water. However, no new point source discharge or expansion of an existing point source discharge to waters upstream of, or tributary to, ONRW shall be allowed if such discharge would not maintain and protect water quality within the ONRW.

- (d) In applying these policies and requirements, the Division will recognize and protect the interest of the Federal Government in interstate and intrastate (including coastal and estuarine) waters. Toward this end the Division will consult and cooperate with the Environmental Protection Agency on all matters affecting the Federal interest.
- (e) In those cases where potential water quality impairment associated with a thermal discharge is involved, the division's actions shall be consistent with Section 316 of the Federal Clean Water Act.
- (f) Variance. Before a variance to a water quality standard is applied to a permitted discharger or to a waterbody, it must be demonstrated that one of the following factors has been satisfied:
 - (i) Naturally occurring pollutant concentrations prevent the attainment of the use; or
- (ii) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating Georgia's water conservation requirements to enable uses to be met; or
- (iii) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place, or
- (iv) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operation such modification in a way that would result in the attainment of the use; or
- (v) Physical conditions related to the natural features of the water body such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
- (vi) Controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.
- (g) Removal of a Designated Use. The State may remove a designated use which is not an existing use, as defined in 40 CFR 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:
 - (i) Naturally occurring pollutant concentrations prevent the attainment of the use; or
- (ii) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating Georgia's water conservation requirements to enable uses to be met; or
- (iii) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place, or

- (iv) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operation such modification in a way that would result in the attainment of the use; or
- (v) Physical conditions related to the natural features of the water body such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
- (vi) Controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.
 - *Applicable to Intrastate and Interstate Waters of Georgia.
- (3) **Definitions.** All terms used in this paragraph shall be interpreted in accordance with definitions as set forth in the Act and as otherwise herein defined:
- (a) "Acute criteria" corresponds to EPA's definition for Criteria Maximum Concentration which is defined in 40 CFR 131.36 as the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) without deleterious effects.
- (b) "Biological integrity" is functionally defined as the condition of the aquatic community inhabiting least impaired waterbodies of a specified habitat measured by community structure and function.
- (c) "Chronic criteria" corresponds to EPA's definition for Criteria Continuous Concentration which is defined in 40 CFR 131.36 as the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.
- (d) "Coastal waters" are those littoral recreational waters on the ocean side of the Georgia coast.
- (e) "Existing instream water uses" include water uses actually attained in the waterbody on or after November 28, 1975.
- (f) "Intake temperature" is the natural or background temperature of a particular waterbody unaffected by any man-made discharge or thermal input.
- (g) "Critical conditions" are the collection of conditions for a particular waterbody used to develop Total Maximum Daily Loads (TMDLs), determine NPDES permit limits, or assess the protection of water quality standards. The Division considers appropriate critical conditions to represent the event that would occur once in ten years on the average or less often, unless otherwise stated.

- (h) "Natural conditions" are the collection of conditions for a particular waterbody used to develop numeric criteria for water quality standards which are based on natural conditions. This is commonly the case for temperature and natural dissolved oxygen standards. For this purpose the Division defines "natural conditions" as those that would remain after removal of all point sources and water intakes, would remain after removal of man made or induced nonpoint sources of pollution, but may include irretrievable effects of man's activities, unless otherwise stated. Natural conditions shall be developed by an examination of historic data, comparisons to reference watersheds, application of mathmetical models, or any other procedure deemed appropriate by the Director.
- (i) "Reasonable and necessary uses" means drinking water supplies, conservation, protection, and propagation of fish, shellfish, wildlife and other beneficial aquatic life, agricultural, industrial, recreational, and other legitimate uses.
- (j) "Secondary contact recreation" is incidental contact with the water, wading, and occasional swimming.
- (k) "Shellfish" refers to clams, oysters, scallops, mussels, and other bivalve mollusks.
- (l) "Water" or "waters of the State" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.
- (m) "Areas where salt, fresh and brackish waters mix" are those areas on the coast of Georgia having a salinity of 0.5 parts per thousand and greater. This includes all of the creeks, rivers, and sounds of the coastal areas of Georgia and portions of the Savannah, Ogeechee, Altamaha, Satilla and St. Marys Rivers where those rivers flow into coastal sounds. Mixing areas are generally maintained by seawater transported through the sounds by tide and wind which is mixed with fresh water supplied by land runoff, subsurface water and river flow. Mixing areas have moving boundaries based upon but not limited to river stage, rainfall, moon phase and water use. (For the purposes of this rule salinity shall be analyzed by in situ measurement using a properly calibrated multiparametric probe connected by hard line to a deck display or by measuring electrical conductivity according to one of the methods specified in Title 40, Code of Federal Regulations, Part 136 and applying the guidance for conversion to salinity in the same volume. Collection of salinity samples must consider riverflow, precipitation, tidal influences and other variables of the estuarine environment and must conform to the National Coastal Assessment-Quality Assurance Project Plan 2001-2004 (EPA/620/R-01/002). Measurements at each sampling location must be made in a distribution in the water column according to the *Quality Assurance Project Plan*, with the minimum observations at each station including surface, mid-depth, and nearbottom readings. In situ salinity analysis must comply with the *Quality Assurance Project Plan* and the manufacturer's guidance for the specific instrument used.)

- (4) **Water Use Classifications.** Water use classifications for which the criteria of this Paragraph are applicable are as follows:
- (a) Drinking Water Supplies;
- (b) Recreation;
- (c) Fishing, Propagation of Fish, Shellfish, Game and Other Aquatic Life;
- (d) Wild River;
- (e) Scenic River;
- (f) Coastal Fishing.
- (5) General Criteria for All Waters. The following criteria are deemed to be necessary and applicable to all waters of the State:
- (a) All waters shall be free from materials associated with municipal or domestic sewage, industrial waste or any other waste which will settle to form sludge deposits that become putrescent, unsightly or otherwise objectionable.
- (b) All waters shall be free from oil, scum and floating debris associated with municipal or domestic sewage, industrial waste or other discharges in amounts sufficient to be unsightly or to interfere with legitimate water uses.
- (c) All waters shall be free from material related to municipal, industrial or other discharges which produce turbidity, color, odor or other objectionable conditions which interfere with legitimate water uses.
- (d) Turbidity. The following standard is in addition to the narrative turbidity standard in Paragraph 391-3-6-.03(5)(c) above: All waters shall be free from turbidity which results in a substantial visual contrast in a water body due to a man-made activity. The upstream appearance of a body of water shall be as observed at a point immediately upstream of a turbidity-causing man-made activity. That upstream appearance shall be compared to a point which is located sufficiently downstream from the activity so as to provide an appropriate mixing zone. For land disturbing activities, proper design, installation, and maintenance of best management practices and compliance with issued permits shall constitute compliance with Paragraph 391-3-6-.03(5)(d).
- (e) All waters shall be free from toxic, corrosive, acidic and caustic substances discharged from municipalities, industries or other sources, such as nonpoint sources, in amounts, concentrations or combinations which are harmful to humans, animals or aquatic life.
- (i) Instream concentrations of the following chemical constituents which are considered to be other toxic pollutants of concern in the State of Georgia shall not exceed the criteria

indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones:

I.	2, 4-Dichlorophenoxyacetic acid (2, 4-D)	/0 μg/I
2.	Methoxychlor	0.03 µg/l*
3.	2, 4, 5-Trichlorophenoxy propionic acid (TP 5 Silvex)	0 μg/l

(ii) Instream concentrations of the following chemical constituents listed by the U.S. Environmental Protection Agency as toxic priority pollutants pursuant to Section 307(a)(1) of the Federal Clean Water Act (as amended) shall not exceed the acute criteria indicated below under 1-day, 10-year minimum flow (1Q10) or higher stream flow conditions and shall not exceed the chronic criteria indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones or in accordance with site specific effluent limitations developed in accordance with procedures presented in 391-3-6-.06. Unless otherwise specified, the criteria below are listed in their total recoverable form. Because most of the numeric criteria for the metals below are listed as the dissolved form, total recoverable concentrations of metals that are measured instream will need to be translated to the dissolved form in order to compare the instream data with the numeric criteria. This translation will be performed using guidance found in "Guidance Document of Dynamic Modeling and Translators August 1993" found in Appendix J of EPA's Water Quality Standards Handbook: Second Edition, EPA-823-B-94-005a or by using other appropriate guidance from EPA.

Chronic		Acute
1.	Arsenic	
	(a) Freshwater	
	$150 \mu g/l^1$	$340 \mu g/11$
	(b) Coastal and Marine Estuarine Waters	
	$36 \mu g/l^1$	69 μg/l1
2.	Cadmium	
	(a) Freshwater	
	$1.3 \mu g/l^{1.3}$	$2.0 \mu g/l^{1,3}$
	(b) Coastal and Marine Estuarine Waters	
	$9.3 \mu\mathrm{g/l}^1$	$42 \mu g/l^{1}$
3.	Chromium III	
	(a) Freshwater	
	$42 \mu g/l^{1,3}$	320 μ g/l ^{1,3}
	(b) Coastal and Marine Estuarine Waters	
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4.	Chromium (VI)	
	(a) Freshwater	16 μg/l¹
	$11 \mu g/l^1$	
	(b) Coastal and Marine Estuarine Waters	1,100 μg/l ¹

	50 μg/l1	
5.	Copper	1.2*2
	(a) Freshwater	$7.0 \mu g/l^{1,2*,3}$
	$5.0 \mu g/l^{1,2*,3}$	1.2
	(b) Coastal and Marine Estuarine Waters	$4.8 \mu g/l^{1,2}$
	$3.1 \mu g/l^{1,2}$	
6.	Lead	1.2
	(a) Freshwater	$30 \mu g/l^{1,3}$
	$1.2 \mu g/l^{1,2*,3}$	
	(b) Coastal and Marine Estuarine Waters	$210 \mu\mathrm{g/l}^1$
	$8.1 \mu \text{g/l}^1$	
7.	Mercury	,
	(a) Freshwater	1.4 μg/ ¹
	$0.012 \mu g/l^2$	
	(b) Coastal and Marine Estuarine Waters	1.8 μg/l
	$0.025 \ \mu g/l^2$	
8.	Nickel	1.2
	(a) Freshwater	$260 \mu g/l^{1,3}$
	$29 \mu g/l^{1,3}$	
	(b) Coastal and Marine Estuarine Waters	74 μg/l ¹
	$8.2 \mu\mathrm{g/l^1}$	
9.	Selenium	
	(a) Freshwater	
	$5.0 \mu g/l$	
	(b) Coastal and Marine Estuarine Waters	$290\mu g/l^1$
	71 $\mu g/l^1$	4
10.	Silver	4
	4	
11.	Zinc	1.2
	(a) Freshwater	65 μ g/l ^{1,3}
	$65 \mu \text{g/l}^{1,3}$	1
	(b) Coastal and Marine Estuarine Waters	$90 \mu g/l^1$
	81 μ g/l ¹	
12.	Lindane [Hexachlorocyclohexane (g-BHCGamma)]	
	(a) Freshwater	0.95 µg/l
	(b) Coastal and Marine Estuarine Waters	$0.16 \mu g/l$

¹ The in-stream criterion is expressed in terms of the dissolved fraction in the water column. Conversion factors used to calculate dissolved criteria are found in the EPA document – National Recommended Water Quality Criteria – Correction, EPA 822-Z-99-001, April 1999.

² The in-stream criterion is lower than the EPD laboratory detection limits (A "*" indicates that the criterion may be higher than or lower than EPD laboratory detection limits depending upon the hardness of the water).

³ The aquatic life criteria for these metals are expressed as a function of total hardness (mg/l) in a water body. Values in the table above assume a hardness of 50 mg/l CaCO3. For other hardness values, the following equations from the EPA document – National Recommended Water Quality Criteria – Correction, EPA 822-Z-99- 001, April 1999 should be used. The minimum hardness allowed for use in these equations shall not be less than 25 mg/l, as calcium carbonate and the maximum shall not be greater than 400 mg/l as calcium carbonate.

Cadmium

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acute criteria=(e1.128[(In (hardness)] - 3.6867))(1.136672-[(In hardness)(0.041838)] \mug/l chronic criteria=(e(0.7852[(In (hardness)] - 2.715))(1.101672-[(In hardness)(0.041838)] \mug/l
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Chromium III

acute criteria= $(e(0.8190[(In (hardness)] + 3.7256))(0.316) \mu g/l chronic criteria=<math>(e(0.8190[(In (hardness)] + 0.6848))(0.860) \mu g/l$

Copper

acute criteria= $(e(0.9422[(In (hardness)] - 1.700))(0.96) \mu g/l chronic criteria=<math>(e(0.8545[(In (hardness)] - 1.702))(0.96) \mu g/l$

Lead

acute criteria=(e(1.273[(In (hardness)] - 1.460))(1.46203-[(In hardness)(0.145712)]) µg/l chronic criteria=(e(1.273[(In (hardness)] - 4.705))(1.46203-[(In hardness)(0.145712)]) µg/l

Nickel

acute criteria= $(e(0.8460[(In (hardness)] + 2.255))(.998) \mu g/l$ chronic criteria= $(e(0.8460[(In (hardness)] + 0.0584))(.997) \mu g/l$

Zinc

acute criteria= $(e(0.8473[(In (hardness)] + 0.884))(0.978) \mu g/l chronic criteria=<math>(e(0.8473[(In (hardness)] + 0.884))(0.986) \mu g/l$

(iii) Instream concentrations of the following chemical constituents listed by the U.S. Environmental Protection Agency as toxic priority pollutants pursuant to Section 307(a)(1) of the Federal Clean Water Act (as amended) shall not exceed criteria indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones or in accordance with site specific effluent limitations developed in accordance with procedures presented in 391-3-6-.06.

1. Chlordane

(a) Freshwater	0.0043 µg/l*
(b) Coastal and Marine Estuarine Waters	$0.004 \mu g/l^*$
2. Cyanide	
(a) Freshwater	$5.2 \mu g/l*$
(b) Coastal and Marine Estuarine Waters	$1.0 \mu g/l^*$

⁴ This pollutant is addressed in 391-3-6-.06.

3. Dieldrin	
(a) Freshwater	0.056 µg/l*
(b) Coastal and Marine Estuarine Waters	$0.0019 \mu g/l*$
4. 4,4'-DDT	$0.001 \mu g/l^*$
5. a-Endosulfan	
(a) Freshwater	0.056 µg/l*
(b) Coastal and Marine Estuarine Waters	$0.0087 \mu g/l*$
6. b-Endosulfan	
(a) Freshwater	0.056 µg/l*
(b) Coastal and Marine Estuarine Waters	$0.0087 \mu g/l*$
7. Endrin	
(a) Freshwater	0.036 µg/l*
(b) Coastal and Marine Estuarine Waters	0.0023 µg/l*
8. Heptachlor	
(a) Freshwater	0.0038 µg/l*
(b) Coastal and Marine Estuarine Waters	$0.0036 \mu/l*$
9. Heptachlor Epoxide	
(a) Freshwater	0.0038 µg/l*
(b) Coastal and Marine Estuarine Waters	0.0036 µg/l*
10. Pentachlorophenol	
(a) Freshwater	2.1 µg/l*
(b) Coastal and Marine Estuarine Waters	7.9 µg/l*
11. PCBs	
(a) Freshwater	0.014 µg/l*
(b) Coastal and Marine Estuarine Waters	0.03 µg/l*
12. Phenol	$300 \mu g/1$
13. Toxaphene	0.0002 µg/1*

^{*}The in-stream criterion is lower than the EPD laboratory detection limits.

(iv) Instream concentrations of the following chemical constituents listed by the U.S. Environmental Protection Agency as toxic priority pollutants pursuant to Section 307(a)(1) of the Federal Clean Water Act (as amended) shall not exceed criteria indicated below under annual average or higher stream flow conditions:

1. Acenaphthene	$2700 \ \mu g/1$
2. Acenaphthylene	**
3. Acrolein	780 μg/l
4. Acrylonitrile	$0.66 \mu g/l$
5. Aldrin	$0.00014 \mu g/l$
6. Anthracene	$110000 \mu g/l$
7. Antimony	$4300 \mu g/1$
8. Arsenic	50 μg/l
9. Benzidine	$0.00054 \mu g/l$
10. Benzo(a)Anthracene	$0.049 \mu g/l$
11. Benzo(a)Pyrene	$0.049 \mu g/l$

12. 3,4-Benzofluoranthene	0.049 µg/l
13. Benzene	71 μg/l
14. Benzo(ghi)Perylene	**
15. Benzo(k)Fluoranthene	$0.049 \mu g/l$
16. Beryllium	**
17. a-BHC-Alpha	$0.013 \mu g/l$
18. b-BHC-Beta	$0.046 \mu g/l$
19. Bis(2-Chloroethyl)Ether	1.4 μg/l
20. Bis(2-Chloroisopropyl)Ether	$170000 \mu g/l$
21. Bis(2-Ethylhexyl)Phthalate	5.9 μg/l
22. Bromoform (Tribromomethane)	$360 \mu g/l$
23. Butylbenzyl Phthalate	5200 μg/l
24. Carbon Tetrachloride	$4.4 \mu g/l$
25. Chlorobenzene	$21000 \mu g/l$
26. Chlorodibromomethane	$34 \mu g/l$
27. 2-Chloroethylvinyl Ether	**
28. Chlordane	$0.0022 \mu g/l$
29. Chloroform (Trichloromethane)	470 μg/l
30. 2-Chloronaphthalene	$4300 \mu g/1$
31. 2-Chlorophenol	$400 \mu g/1$
32. Chrysene	$0.049 \mu g/l$
33. Dibenzo(a,h)Anthracene	$0.049 \mu g/l$
34. Dichlorobromomethane	46 μg/l
35. 1,2-Dichloroethane	99 μg/l
36. 1,1-Dichloroethylene	$3.2 \mu\mathrm{g/l}$
37. 1,2-Dichloropropane	$39 \mu g/1$
38. 1,3-Dichloropropylene	1700 μg/l
39. 2,4-Dichlorophenol	790 μg/l
40. 1,2-Dichlorobenzene	17000 μg/l
41. 1,3-Dichlorobenzene	2600 μg/l
42. 1,4-Dichlorobenzene	2600 μg/l
43. 3,3'-Dichlorobenzidine	$0.077 \mu g/l$
44. 4,4'-DDT	$0.00059 \mu g/l$
45. 4,4'-DDD	$0.00084 \mu g/l$
46. 4,4'-DDE	$0.00059 \mu g/l$
47. Dieldrin	$0.00014 \mu g/l$
48. Diethyl Phthalate	$120000 \mu g/l$
49. Dimethyl Phthalate	2900000 μg/l
50. 2,4-Dimethylphenol	2300 μg/1
51. 2,4-Dinitrophenol	14000 μg/l
52. Di-n-Butyl Phthalate	12000 µg/l
53. 2,4-Dinitrotoluene	9.1 μg/l
54. 1,2-Diphenylhydrazine	0.54 μg/l
55. Endrin	$0.81 \mu g/1$
56. Endrin Aldehyde	0.81 μg/l
57. alpha-Endosulfan	240 μg/1
1	1 0

58	beta-Endosulfan	240 μg/1
	Endosulfan Sulfate	240 μg/l
	Ethylbenzene	29000 μg/l
	Fluoranthene	370 μg/l
	Fluorene	14000 μg/l
	Heptachlor	$0.00021 \mu g/l$
	Heptachlor Epoxide	0.00011 µg/l
	Hexachlorobenzene	$0.00077 \mu g/l$
	Hexachlorobutadiene	50 μg/l
	Hexachlorocyclopentadiene	17000 μg/l
	Hexachloroethane	8.9 μg/l
	Indeno(1,2,3-cd)Pyrene	0.049 μg/l
	Isophorone	2600 μg/l
	Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]	$0.063 \mu g/l$
	Methyl Bromide (Bromomethane)	4000 μg/l
	Methyl Chloride (Chloromethane)	**
	Methylene Chloride	$1600 \mu g/1$
	2-Methyl-4,6-Dinitropheno	1 765 μg/l
	3-Methyl-4-Chlorophenol	**
	Nitrobenzene	1900 μg/l
78.	N-Nitrosodimethylamine	$1.4 \mu g/1$
	N-Nitrosodiphenylamine	16 μg/l
	PCBs	$0.00017 \mu g/l$
82.	Pentachlorophenol	$8.2 \mu g/1$
83.	Phenanthrene	**
84.	Phenol	$4,600,000 \mu g/l$
85.	Pyrene	11,000 μg/l
86.	1,1,2,2-Tetrachloroethane	11 μg/l
87.	Tetrachloroethylene	$8.85 \mu g/l$
88.	Thallium	$6.3 \mu g/l$
89.	Toluene	$200000 \mu g/l$
90.	Toxaphene	$0.00075 \ \mu g/1$
91.	1,2-Trans-Dichloroethylene	140000
92.	1,1,2-Trichloroethane	$42 \mu g/l$
	Trichloroethylene	81 μg/l
	2,4,6-Trichlorophenol	$6.5 \mu g/l$
95.	1,2,4-Trichlorobenzene	$940 \mu g/1$
96.	Vinyl Chloride	$525 \mu g/l$

^{**} These pollutants are addressed in 391-3-6-.06.

⁽v) Site specific criteria for the following chemical constituents will be developed on an as-needed basis through toxic pollutant monitoring efforts at new or existing discharges that are suspected to be a source of the pollutant at levels sufficient to interfere with designated uses:

1. Asbestos

- (vi) Instream concentrations of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) must not exceed 0.0000012 µg/l under long-term average stream flow conditions.
- (vii) Mercury: For the protection of human health, total mercury concentrations bioaccumulating in a waterbody, in a representative population of fish, shellfish and/or other seafood representing different trophic levels, shall not exceed a total mercury concentration in edible tissues of 0.3 mg/kg wet weight. This standard is in accord with the USEPA *Water Quality Criterion for the Protection of Human Health:*Methylmercury, (January 2001, EPA-823-R-01-001), and because nearly 100% of the mercury in fish tissue is methylmercury, adoption of the standard as total mercury is an additional conservative measure. The representative fish tissue total mercury concentration for a waterbody is determined by calculating a Trophic-Weighted Residue Value, as described by the Georgia EPD Protocol (October 19, 2001).
- (f) Applicable State and Federal requirements and regulations for the discharge of radioactive substances shall be met at all times.
- (g) The dissolved oxygen criteria as specified in individual water use classifications shall be applicable at a depth of one meter below the water surface; in those instances where depth is less than two meters, the dissolved oxygen criterion shall be applied at a middepth. On a case specific basis, alternative depths may be specified.
- (6) **Specific Criteria for Classified Water Usage.** In addition to the general criteria, the following criteria are deemed necessary and shall be required for the specific water usage as shown:
- (a) Drinking Water Supplies: Those waters approved as a source for public drinking water systems permitted or to be permitted by the Environmental Protection Division. Waters classified for drinking water supplies will also support the fishing use and any other use requiring water of a lower quality.
- (i) Bacteria: For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 per 100 ml based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 ml (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 ml in lakes and reservoirs and 500 per 100 ml in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 per 100 ml based on at least four samples collected from a given sampling site over a 30- day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 per 100 ml for any sample. The State does not encourage swimming in surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of fecal coliform.

- (ii) Dissolved oxygen: A daily average of 6.0 mg/l and no less than 5.0 mg/l at all times for waters designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times for water supporting warm water species of fish.
- (iii) pH: Within the range of 6.0 8.5.
- (iv) No material or substance in such concentration that, after treatment by the public water treatment system, exceeds the maximum contaminant level established for that substance by the Environmental Protection Division pursuant to the Georgia Rules for Safe Drinking Water.
- (v) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F of natural stream temperatures.
- (b) Recreation: General recreational activities such as water skiing, boating, and swimming, or for any other use requiring water of a lower quality, such as recreational fishing. These criteria are not to be interpreted as encouraging water contact sports in proximity to sewage or industrial waste discharges regardless of treatment requirements:
- (i) Bacteria: Fecal coliform not to exceed the following geometric means based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours:
- (1) Coastal waters 100 per 100 ml
- (2) All other recreational waters 200 per 100 ml
- (3) Should water quality and sanitary studies show natural fecal coliform levels exceed 200/100 ml (geometric mean) occasionally in high quality recreational waters, then the allowable geometric mean fecal coliform level shall not exceed 300 per 100 ml in lakes and reservoirs and 500 per 100 ml in free flowing fresh water streams.
- (ii) Dissolved Oxygen: A daily average of 6.0 mg/l and no less than 5.0 mg/l at all times for waters designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times for waters supporting warm water species of fish.
- (iii) pH: Within the range of 6.0 8.5.
- (iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine

waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

- (c) Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; secondary contact recreation in and on the water; or for any other use requiring water of a lower quality:
- (i) Dissolved Oxygen: A daily average of 6.0 mg/l and no less than 5.0 mg/l at all times for water designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times for waters supporting warm water species of fish.
- (ii) pH: Within the range of 6.0 8.5.
- (iii) Bacteria: For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 per 100 ml based on at least four samples collected from a given sampling site over a 30- day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 ml (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 ml in lakes and reservoirs and 500 per 100 ml in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 per 100 ml based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 per 100 ml for any sample. The State does not encourage swimming in surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of fecal coliform. For waters designated as approved shellfish harvesting waters by the appropriate State agencies, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in the National Shellfish Sanitation Program Manual of Operation, Revised 1988, Interstate Shellfish Sanitation Conference, U.S. Department of Health and Human Services (PHS/FDA), and the Center for Food Safety and Applied Nutrition. Streams designated as generally supporting shellfish are listed in Paragraph 391-3-6-.03(14).
- (iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.
- (d) Wild River: For all waters designated in 391-3-6-.03(13) as "Wild River," there shall be no alteration of natural water quality from any source.

- (e) Scenic River: For all waters designated in 391-3-6-.03(13) as "Scenic River," there shall be no alteration of natural water quality from any source.
- (f) Coastal Fishing: This classification will be applicable to specific sites when so designated by the Environmental Protection Division. For waters designated as "Coastal Fishing", site specific criteria for dissolved oxygen will be assigned and detailed by footnote in Section 391-3-6-.03(13), "Specific Water Use Classifications." All other criteria and uses for the fishing use classification will apply for coastal fishing.
- (7) **Natural Water Quality.** It is recognized that certain natural waters of the State may have a quality that will not be within the general or specific requirements contained herein. These circumstances do not constitute violations of water quality standards. This is especially the case for the criteria for dissolved oxygen, temperature, pH and fecal coliform. NPDES permits and best management practices will be the primary mechanisms for ensuring that discharges will not create a harmful situation.
- (8) **Treatment Requirements.** Notwithstanding the above criteria, the requirements of the State relating to secondary or equivalent treatment of all waste shall prevail. The adoption of these criteria shall in no way preempt the treatment requirements.
- (9) **Streamflows.** Specific criteria or standards set for the various parameters apply to all flows on regulated streams. On unregulated streams, they shall apply to all streamflows equal to or exceeding the 7-day, 10-year minimum flow (7Q10) and/or the 1-day, 10-year minimum flow (1Q10). All references to 7-day, 10-year minimum flow (7Q10) and 1-day, 10-year minimum flow (1Q10) also apply to all flows on regulated streams. All references to annual average stream flow also apply to long-term average stream flow conditions. Numeric criteria exceedences that occur under streamflows lower than 7Q10 or 1Q10, whichever applies, do not constitute violations of water quality standards as long as all current permit conditions are met.
- (10) **Mixing Zone.** Effluents released to streams or impounded waters shall be fully and homogeneously dispersed and mixed insofar as practical with the main flow or water body by appropriate methods at the discharge point. Use of a reasonable and limited mixing zone may be permitted on receipt of satisfactory evidence that such a zone is necessary and that it will not create an objectionable or damaging pollution condition. Protection from acute toxicity shall be provided within any EPD designated mixing zone to ensure a zone of safe passage for aquatic organisms. The procedure is as described in paragraph 391-3-6-.06(4)(d)(5)(vi), except that the numerical pass/fail criteria applies to the end-of-pipe without the benefit of dilution provided by the receiving stream.
- (11) **Toxic Pollutant Monitoring.** The Division will monitor waters of the State for the presence or impact of Section 307(a)(l) Federal Clean Water Act toxic pollutants, and other priority pollutants. The monitoring shall consist of the collection and assessment of chemical and/or biological data as appropriate from the water column, from stream bed sediments, and/or from fish tissue. Specific stream segments and chemical constituents for monitoring shall be determined by the Director on the basis of the potential for water

quality impacts from toxic pollutants from point or nonpoint waste sources. Singularly or in combination, these constituents may cause an adverse effect on fish propagation at levels lower than the criteria. Instream concentrations will be as described in 391-3-6-.03(5)(e). Additional toxic substances and priority pollutants will be monitored on a case specific basis using Section 304(a) Federal Clean Water Act guidelines or other scientifically appropriate documents.

- (12) **Fecal Coliform Criteria.** The criteria for fecal coliform bacteria provide the regulatory framework to support the USEPA requirement that States protect all waters for the use of primary contact recreation or swimming. This is a worthy national goal, although potentially unrealistic with the current indicator organism, fecal coliform bacteria, in use today. To assure that waters are safe for swimming indicates a need to test waters for pathogenic bacteria. However, analyses for pathogenic bacteria are expensive and results are generally difficult to reproduce quantitatively. Also, to ensure the water is safe for swimming would require a whole suite of tests be done for organisms such as *Salmonella*, *Shigella*, *Vibrio*, etc., as the presence/absence of one organism would not document the presence/absence of another. This type of testing program is not possible due to resource constraints. The environmental community in the United States has based the assessment of the bacteriological quality of water on testing for pathogenic indicator organisms, principally the coliform group. The assessment of streams, rivers, lakes, and estuaries in Georgia and other States is based on fecal coliform organisms.
- (a) Coliform bacteria live in the intestinal tract of warm blooded animals including man. These organisms are excreted in extremely high numbers, averaging about 1.5 billion coliform per ounce of human feces. Pathogenic bacteria also originate in the fecal material of diseased persons. Therefore, waters with high levels of fecal coliform bacteria represent potential problem areas for swimming. However, there is no positive scientific evidence correlating elevated fecal coliform counts with transmission of enteric diseases. In addition, these bacteria can originate from any warm blooded animal or from the soil.
- (b) Monitoring programs have documented fecal coliform levels in excess of the criteria in many streams and rivers in urban areas, agricultural areas, and even in areas not extensively impacted by man such as national forest areas. This is not a unique situation to Georgia as similar levels of fecal coliform bacteria have been documented in streams across the nation. The problem appears to lie in the lack of an organism which specifically indicates the presence of human waste materials which can be correlated to human illness. Other organisms such as the Enterococci group and *E. coli* have been suggested by the USEPA as indicator organisms. However, testing using these organisms by States and the USEPA has indicated similar problems with these indicator organisms.
- (c) The Environmental Protection Division will conduct a monitoring project from 1993 through 1995 to evaluate the use of *E. coli* and Enterococci as indicators of bacteriological quality in Georgia. The Environmental Protection Division will also conduct studies to determine if a better human specific indicator can be found to replace current indicator organisms.

- (13) Acceptance of Data. Sampling methods for water quality samples collected and reported by any person to the Division for its use in listing or delisting impaired waters pursuant to the State's responsibilities under Sections 303(d) and 305(b) of the Federal Act shall conform to the guidance in the Water Protection Branch Quality Assurance Manual (June, 1999), Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, Atlanta, GA 30354. Analytical standards for these samples must comply with the requirements of Title 40, Code of Federal Regulations, Part 136. Sample analyses shall be performed by an analyst certified in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act, as amended, or by a laboratory facility accredited in compliance with the Georgia Rules for Commercial Environmental Laboratory Accreditation (O.C.G.A. 12-2-9). A site-specific sampling and quality assurance plan is required if the data is to be considered and Division concurrence must be obtained prior to monitoring. Laboratories operated by Federal and State government agencies and laboratories at academic institutions with active or current contracts with the Division are exempt from these provisions.
- (14) **Specific Water Use Classifications.** Beneficial water uses assigned by the State to all surface waters. These classifications are scientifically determined to be the best utilization of the surface water from an environmental and economic standpoint. Streams and stream reaches not specifically listed are classified as Fishing. The specific classifications are as follows:

SAVANNAH RIVER BASIN		<u>CLASSIFICATION</u>
Chattooga River	Georgia-North	
Carolina	State Line to	
	Tugaloo Reservoir	Wild and Scenic
West Fork Chattooga	Confluence of	
C	Overflow Creek and	
	Clear Creek to	
	Confluence with	
	Chattooga River (7.3	
	mi.)	Wild and Scenic
Tallulah River	Headwaters of Lake	
	Burton to Confluence	
	with Chattooga	River Recreation
Tugaloo River	Confluence of Tallulah	
C	and Chattooga Rivers	
	to Yonah Lake	Dam Recreation
Savannah River	Highway 184 to Clark	
	Hill Dam (Mile 238)	Recreation
Savannah River	Clark Hill Dam (Mile	
	238) to Augusta, 13th	
	Street Bridge	Drinking Water
Savannah River	US Hwy. 301 Bridge	<i>5</i> · · · · · ·
	(Mile 129) to Seaboard	

Savannah River Savannah River	Coastline RR Bridge (Mile 27.4) Seaboard Coastline RR Bridge (Mile 27.4) to Fort Pulaski (Mile 0) Fort Pulaski (Mile 0) to Open Sea and all littoral waters of Tybee Island	Drinking Water Coastal Fishing ¹ Recreation
OGEECHEE RIVER BASIN		CLASSIFICATION
Ogeechee River Little Ogeechee River	U.S. Hwy. 17 Bridge to Open Sea and littoral waters of Skidaway, Ossabaw, Sapelo, and St. Catherines Islands South end of White Bluff Road near Carmelite Monastery to Open Sea and littoral waters of	Recreation
	Skidaway and Ossabaw Islands	Recreation
OCONEE RIVER BASIN	Coordin Hum. 92 to	CLASSIFICATION
OCONEE RIVER BASIN Middle Oconee River North Oconee River J	Georgia Hwy. 82 to Athens Water Intake ackson County Road	CLASSIFICATION Drinking Water
Middle Oconee River North Oconee River J	Athens Water Intake ackson County Road 432 to Athens Water Intake	
Middle Oconee River North Oconee River J Oconee River	Athens Water Intake ackson County Road 432 to Athens Water Intake Georgia Hwy. 16 to Sinclair Dam	Drinking Water
Middle Oconee River North Oconee River J Oconee River Oconee River	Athens Water Intake ackson County Road 432 to Athens Water Intake Georgia Hwy. 16 to	Drinking Water Drinking Water
Middle Oconee River North Oconee River J Oconee River	Athens Water Intake ackson County Road 432 to Athens Water Intake Georgia Hwy. 16 to Sinclair Dam Sinclair Dam to	Drinking Water Drinking Water Recreation
Middle Oconee River North Oconee River J Oconee River Oconee River Oconee River UPPER OCMULGEE RIVER	Athens Water Intake ackson County Road 432 to Athens Water Intake Georgia Hwy. 16 to Sinclair Dam Sinclair Dam to Georgia Hwy. 22 Georgia Hwy. 57 to U.S. Hwy. 80	Drinking Water Drinking Water Recreation Drinking Water
Middle Oconee River North Oconee River J Oconee River Oconee River Oconee River UPPER OCMULGEE RIVER Big Haynes Creek	Athens Water Intake ackson County Road 432 to Athens Water Intake Georgia Hwy. 16 to Sinclair Dam Sinclair Dam to Georgia Hwy. 22 Georgia Hwy. 57 to U.S. Hwy. 80 Georgia Hwy. 20 to Bald Rock Road	Drinking Water Drinking Water Recreation Drinking Water Drinking Water
Middle Oconee River North Oconee River J Oconee River Oconee River Oconee River UPPER OCMULGEE RIVER	Athens Water Intake ackson County Road 432 to Athens Water Intake Georgia Hwy. 16 to Sinclair Dam Sinclair Dam to Georgia Hwy. 22 Georgia Hwy. 57 to U.S. Hwy. 80 Georgia Hwy. 20 to	Drinking Water Drinking Water Recreation Drinking Water Drinking Water CLASSIFICATION

Jackson Lake From South River at

Georgia Hwy. 36; from

Yellow River at

Georgia Hwy. 36; from

Alcovy River at

Newton Factory Road Bridge to Lloyd Shoals

Dam

Georgia Highway 78 Big Haynes Creek

to Confluence with the

Yellow River **Drinking Water**

Recreation

Drinking Water

Drinking Water

Recreation

LOWER OCMULGEE RIVER BASIN CLASSIFICATION

Towaliga River Headwaters to Georgia

Hwy. 36

Towaliga River Georgia Hwy. 36 to

> High Falls Dam Recreation

Georgia Hwy. 18 to Ocmulgee River

Macon Water Intake

Tobesofkee Creek Lake Tobesofkee Recreation

ALTAMAHA RIVER BASIN CLASSIFICATION

All littoral waters on the ocean side of St.

Simons, Sea, and Sapelo Islands Recreation

SATILLA RIVER BASIN **CLASSIFICATION**

All littoral waters on the ocean side of

Cumberland and Jekyll Islands Recreation

ST. MARYS RIVER BASIN CLASSIFICATION

All littoral waters on the ocean side of

Cumberland Island Recreation

FLINT RIVER BASIN CLASSIFICATION

Flint River Woolsey Road (Fayette

Clayton Counties) to

Georgia Hwy. 16 **Drinking Water**

Flint River Georgia Hwy. 27 to

Georgia Power Dam at

Lake Worth, Albany

Bainbridge, U.S. Hwy.

Flint River

84 Bridge to Jim

Woodruff Dam, Lake

Seminole Recreation

CHATTAHOOCHEE RIVER BASIN CLASSIFICATION Chattahoochee River Headwaters to Buford

Dam Recreation

Chattahoochee River Buford Dam to

Atlanta (Peachtree Drinking Water

Creek)

Recreation

Chattahoochee River Atlanta (Peachtree

Creek) to Cedar Creek Fishing²

Chattahoochee River New River to West

Point Dam Recreation

Chattahoochee River West Point Dam to

West Point Mfg Company Water

Intake Drinking Water

Chattahoochee River Osanippa Creek to

Columbus (North Recreation and

Highland Dam) Drinking Water

Chattahoochee River Cowikee Creek to

Great Southern Division of Great Northern Paper

Company Recreation

Chattahoochee River Georgia Hwy. 91

(Neal's Landing) to

Jim Woodruff Dam Recreation

Big Creek Georgia Hwy. 400 to

City of Roswell Water

Intake Drinking Water

Dog River Headwaters to Dog

River Reservoir Drinking Water

Bear Creek Headwaters to

Douglasville-Douglas County Water and Sewer Authority

Water Intake Drinking Water

TALLAPOOSA RIVER BASIN

CLASSIFICATION

Tallapoosa River Headwaters to Georgia

Hwy. 100 Drinking Water

Little Tallapoosa Headwaters to SCS

Dam No. 36

(Carrollton River Raw

Water Intake) Drinking Water

COOSA RIVER BASIN

CLASSIFICATION

Conasauga River Georgia Hwy. 2 to

Dalton Water Intake Drinking Water

Ellijay River	Headwaters to Ellijay Water Intake	Drinking Water
Cartecay River	Headwaters to Ellijay Water Intake	C
Coosawattee River	Confluence to Mountaintown Creek	Drinking Water
Coosawattee River	to Carters Dam U.S. Hwy. 411 to Confluence of	Recreation
Oostanaula River	Conasauga River Confluence to Conasauga and Coosawattee Rivers to	Drinking Water
Oostanaula River	Calhoun Water Intake Confluence with Armuchee Creek to	Drinking Water
Oostanaula River	Rome Water Intake Confluence of Little Dry Creek (below Rome Water Intake) to	Drinking Water
Etowah River	Coosa River Cherokee County Road 782 to Canton Water	Fishing
Etowah River	Intake Georgia Hwy. 20 to	Drinking Water Recreation and
Etowah River	Allatoona Dam Allatoona Dam to Cartersville Water	Drinking Water
Coosa River	Intake Confluence of Etowah and Coosawattee to	Drinking Water
Coosa River	Mayo's Lock and Dam At the Alabama State	Fishing
Mill Creek	Line Headwaters to Dalton	Recreation
Conasauga River	Water Supply Waters Within the	Drinking Water
Jacks Creek	Cohutta Wilderness Area Waters Within the	Wild and Scenic
	Cohutta Wilderness Area	Wild and Scenic
TENNESSEE RIVER BASIN Hiawassee River	Headwaters to Georgia-North	CLASSIFICATION

Carolina State Line (including Lake

Chatuge) Recreation

Nottely River Headwaters to

Georgia-North

Carolina State Line Recreation

Toccoa River Headwaters to

Atlanta water supply withdrawal).

Georgia-Tennessee State Line (including

Lake Blue Ridge) Recreation

(1) Site specific criteria for this classification are minimum instantaneous and will apply throughout the water column. The dissolved oxygen criteria is no less than 3.0 mg/l in June, July, August, September, and October; no less than 3.5 mg/l in May and November; and no less than 4.0 mg/l in December, January, February, March, and April.
(2) Specific criteria apply at all times when the river flow measured at a point immediately upstream from Peachtree Creek equals or exceeds 750 cfs (Atlanta gage flow minus

(15) **Trout Streams.** Streams designated as Primary Trout Waters are waters supporting a self-sustaining population of Rainbow, Brown or Brook Trout. Streams designated as Secondary Trout Streams are those with no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. Trout streams are classified in accordance with the designations and criteria as follows:

(a) Criteria.

- (i) There shall be no elevation of natural stream temperatures for Primary Trout Waters; 2°F or less elevation for Secondary Trout Waters.
- (ii) No person shall construct an impoundment on Primary Trout Waters, except on streams with drainage basins less than 50 acres upstream of the impoundment. Impoundments on streams with drainage basins less than 50 acres must be approved by the Division.
- (iii) No person shall construct an impoundment on Secondary Trout Waters without the approval of the Division.
- (b) Designations by County.

BARTOW COUNTY

Primary:

None.
Secondary:
1. Boston Creek watershed upstream from Georgia Hwy. 20.
2. Connesena Creek watershed.
3. Dykes Creek watershed.
4. Pine Log Creek watershed.
5. Pyle Creek watershed.
6. Salacoa Creek watershed.
7. Spring Creek watershed.
8. Stamp Creek watershed upstream from Bartow County Road 269.
9. Toms Creek watershed upstream from Bartow County Road 82.
10. Two Run Creek watershed.
11. Ward Creek watershed.
CARROLL COUNTY
Primary:
None.
Secondary:
1. Brooks Creek watershed.
2. Mud Creek watershed.
3. Tallapoosa River.
CATOOSA COUNTY
Primary:
None.

Secondary:

- 1. Hurricane Creek watershed upstream from Peters Branch.
- 2. Little Chickamauga Creek watershed upstream from Catoosa County Road 387.
- 3. Tiger Creek watershed upstream from Georgia Hwy. 2.
- 4. Dry Creek watershed upstream from Catoosa County Road 257

(East Chickamauga Creek Watershed).

CHATTOOGA COUNTY

Primary:

None.

- 1. Allgood Branch watershed upstream from Southern Railroad.
- 2. Chappel Creek watershed.
- 3. Chelsea Creek watershed.
- 4. East Fork Little River watershed.
- 5. Hinton Creek watershed.
- 6. Kings Creek watershed.
- 7. Little Armuchee Creek watershed upstream from Chattooga County Road 326.
- 8. Middle Fork Little River watershed.
- 9. Mt. Hope Creek watershed.
- 10. Perennial Spring watershed.
- 11. Raccoon Creek watershed upstream from Georgia Hwy. 48.
- 12. Ruff Creek watershed.

13. Storey Mill Creek watershed.
14. Taliaferro Creek watershed.
CHEROKEE COUNTY
Primary:
None.
Secondary:
1. Boston Creek watershed.
2. Pine Log Creek watershed.
3. Salacoa Creek watershed.
4. Stamp Creek watershed.
5. Bluff Creek watershed upstream from Cherokee County Road 114.
6. Murphy Creek watershed.
7. Soap Creek watershed upstream from Cherokee County Road 116.
8. Wiley Creek watershed.
COBB COUNTY
Primary:
None.
Secondary:
1. Chattahoochee River upstream from I-285 West Bridge.
DADE COUNTY
Primary:
None.
Secondary:

1. Allison Creek watershed. 2. East Fork Little River watershed. 3. Lookout Creek watershed upstream from Dade County Road 197. 4. Rock Creek watershed. 5. West Fork Little River watershed. **DAWSON COUNTY Primary:** 1. Amicalola Creek watershed upstream from Dawson County Road 192 (Devil's Elbow Road). 2. Sweetwater Creek watershed. 3. Anderson Creek watershed. 4. Long Swamp Creek watershed. 5. Nimblewill Creek watershed. **Secondary:** 1. Amicalola Creek watershed from Georgia Hwy. 53 upstream to Dawson County Road 192 (Devil's Elbow Road). 2. Shoal Creek watershed upstream from the mouth of Burt Creek. **ELBERT COUNTY Primary:** None.

p]Savannah River for the ten-mile reach downstream from Hartwell

Secondary:

FANNIN COUNTY

Dam.

Primary:
1. Conasauga River — Jacks River watershed
2. Ellijay River watershed.
3. Etowah River watershed.

- 4. Fightingtown Creek watershed.
- 5. Owenby Creek watershed.
- 6. Persimmon Creek watershed.
- 7. South Fork Rapier Mill Creek watershed.
- 8. Toccoa River watershed upstream to Blue Ridge Reservoir dam.
- 9. Toccoa River watershed upstream from the backwater of Blue Ridge Reservoir.
- 10. Tumbling Creek watershed.
- 11. Wilscot Creek watershed.

Secondary:

All streams or stream sections not classified as primary in the above list.

FLOYD COUNTY

Primary:

None.

- 1. Dykes Creek watershed.
- 2. Johns Creek watershed upstream from Floyd County Road 212.
- 3. Kings Creek watershed.
- 4. Lavender Creek watershed upstream from Floyd County Road 234.
- 5. Little Cedar Creek watershed.

FORSYTH COUNTY
Primary:
None.
Secondary:
1. Chattahoochee River.
FULTON COUNTY
Primary:
None.
Secondary:
1. Chattahoochee River upstream from I-285 West Bridge.
GILMER COUNTY
Primary:
1. Cartecay River watershed upstream from the mouth of Clear Creek.
2. Clear Creek watershed upstream from Gilmer County Road 92.
3. Conasauga River — Jacks River watershed.
4. Ellijay River watershed upstream from the mouth of Kells Creek.
5. Harris Creek watershed.
6. Johnson Creek watershed.

6. Mt. Hope Creek watershed.

9. Toms Creek watershed.

7. Spring Creek watershed (flows into Etowah River).

8. Spring Creek watershed (flows into State of Alabama).

10. Silver Creek watershed upstream from Georgia Highway 1E.

- 7. Mountaintown Creek watershed upstream from U.S. Highway 76.
- 8. Tails Creek watershed upstream from Georgia Hwy. 282.
- 9. Toccoa River Fightingtown Creek watershed.

Secondary:

- 1. All streams or sections thereof except the Coosawattee River downstream from Ga. Hwy. 5 Bridge, and Talking Rock Creek (not including tributaries) and those classified as primary.
- 2. Ball Creek watershed.
- 3. Sevenmile Creek watershed.
- 4. Town Creek watershed.
- 5. Wildcat Creek watershed.

GORDON COUNTY

Primary:

None.

Secondary:

- 1. Johns Creek watershed.
- 2. Long Branch watershed.
- 3. Pine Log Creek watershed upstream from Georgia Hwy. 53.
- 4. Pin Hook Creek watershed upstream from Ryo Road.
- 5. Rocky Creek watershed upstream from West Union Road.
- 6. Salacoa Creek watershed upstream from U.S. Hwy. 411.
- 7. Snake Creek watershed.

GWINNETT COUNTY

Primary:
None.
Secondary:
1. Chattahoochee River.
HABERSHAM COUNTY
Primary:
1. Chattahoochee River watershed upstream from Georgia Hwy. 255 Bridge.
2. Middle Fork Broad River watershed upstream from USFS Route 92-B.
3. Panther Creek watershed.
4. Soque River watershed upstream from King's Bridge (bridge on Georgia Hwy. 197 just below the mouth of Shoal Creek).
Secondary:
1. Chattahoochee River watershed upstream from Georgia Hwy. 115 to the Georgia Hwy. 255 Bridge.
2. Davidson Creek watershed.
3. Middle Fork Broad River tributaries entering below USFS Route 92-B.
4. Nancytown Creek watershed upstream from Nancytown Lake.
5. North Fork Broad River watershed.
6. Soque River watershed upstream from the mouth of Deep Creek to King's Bridge.
7. Toccoa Creek watershed.
HARALSON COUNTY
Primary:
None.
Secondary:

2. Flatwood Creek watershed.
3. Lassetter Creek watershed.
4. Mann Creek watershed upstream from Haralson County Road 162.
5. Tallapoosa River watershed upstream from Haralson County Road 222.
6. Mountain Creek watershed.
7. Tallapoosa Creek watershed.
HART COUNTY
Primary:
None.
Secondary:
1. Savannah River.
LUMPKIN COUNTY
Primary:
1. Amicalola Creek watershed.
2. Camp Creek watershed.
3. Cane Creek watershed upstream from Cane Creek Falls.
4. Cavender Creek watershed.
5. Chestatee River watershed upstream from Lumpkin County Road 52-S976.
6. Clay Creek watershed.
7. Etowah River watershed upstream from the Georgia Hwy. 52 Bridge.
8. Hurricane Creek watershed upstream from Lumplin County Road 118.

1. Beach Creek watershed upstream from Haralson County Road 34.

- 9. Mooney Branch watershed.
- 10. Tobacco Pouch Branch watershed.

Secondary:

- 1. Cane Creek watershed upstream from Georgia Hwy. 52 Bridge to Cane Creek Falls.
- 2. Chestatee River watershed upstream from the mouth of Tesnatee Creek to Lumpkin County Road 52-S976.
- 3. Etowah River watershed upstream from Castleberry Bridge to Georgia Hwy. 52 except those classified as primary above.
- 4. Shoal Creek watershed.
- 5. Yahoola Creek watershed upstream from Georgia Hwy. 52.

MURRAY COUNTY

Primary:

- 1. Conasauga Jacks River watershed upstream from Georgia- Tennessee state line.
- 2. Holly Creek watershed upstream from Murray County Rd. SR826 (U.S. Forest Service line).
- 3. Rock Creek watershed upstream from Murray County Rd. 4 (Dennis).

- 1. All tributaries to Carters Reservoir.
- 2. Holly Creek watershed (including Emory Creek watershed) upstream from Emory Creek to Murray County Road SR826 (U.S. Forest Service line).
- 3. Mill Creek watershed upstream from Murray County Road 27.
- 4. North Prong Sumac Creek watershed.
- 5. Sugar Creek watershed upstream from Murray County Road 4.
- 6. Sumac Creek watershed upstream from Coffey Lake.
- 7. Mill Creek watershed.

8. Rock Creek watershed upstream of Murray County Road 301.

PAULDING COUNTY

Primary:

None.

Secondary:

- 1. Possum Creek watershed upstream from Paulding County Road 64.
- 2. Powder Creek watershed.
- 3. Pumpkinvine Creek watershed upstream from Paulding County Road 231.
- 4. Pyle Creek watershed.
- 5. Raccoon Creek watershed upstream from Road SR2299.
- 6. Tallapoosa River watershed.
- 7. Ward Creek watershed.
- 8. Simpson Creek watershed.
- 9. Thompson Creek watershed.

PICKENS COUNTY

Primary:

- 1. Cartecay River watershed.
- 2. Talking Rock Creek watershed upstream from Route S1011.

- 1. Amicalola Creek watershed.
- 2. East Branch watershed (including Darnell Creek watershed).
- 3. Fisher Creek watershed (upstream from the confluence of Talona Creek and Fisher Creek).
- 4. Fourmile Creek watershed.

9. Mud Creek watershed.
10. Pin Hook Creek watershed.
11. Polecat Creek watershed.
12. Rock Creek watershed.
13. Salacoa Creek watershed.
14. Scarecorn Creek watershed upstream from Georgia Hwy. 53.
15. Ball Creek watershed.
16. Bluff Creek watershed.
17. Sevenmile Creek watershed.
18. Soap Creek watershed.
19. Town Creek watershed.
20. Wildcat Creek watershed.
POLK COUNTY
Primary:
None.
Secondary:
1. Cedar Creek watershed upstream from Polk County Road 121.
2. Lassetter Creek watershed.
3. Little Cedar Creek watershed.

8. Long Swamp Creek watershed upstream from Pickens County Road 294.

5. Hobson Creek watershed.

7. Long Branch watershed.

6. Little Scarecorn Creek watershed.

- 4. Pumpkinpile Creek watershed upstream from Road SR1032.
- 5. Spring Creek watershed.
- 6. Swinney Branch watatershed.
- 7. Thomasson Creek watershed.
- 8. Fish Creek watershed upstream of Plantation Pipeline.
- 9. Silver Creek watershed.
- 10. Simpson Creek watershed upstream of Lake Dorene.
- 11. Thompson Creek watershed upstream of Polk County Road 441.

RABUN COUNTY

Primary:

- 1. Chattooga River all tributaries classified as primary.
- 2. Little Tennessee River entire stream and tributaries classified as primary except all streams or sections thereof classified as secondary.
- 3. Tallulah River entire stream and tributaries classified as primary except the Tallulah River downstream from Rabun Dam to headwaters of Tugaloo Lake.

Secondary:

- 1. Little Tennessee River downstream from U.S. Hwy. 441 Bridge.
- 2. Mud Creek downstream from Sky Valley Ski Resort Lake to the Little Tennessee River.

STEPHENS COUNTY

Primary:

- 1. Middle Fork Broad River watershed upstream from USFS Route 92-B.
- 2. Panther Creek watershed upstream from the mouth of Davidson Creek.

- 1. Davidson Creek watershed.
- 2. Leatherwood Creek watershed upstream from Georgia Hwy. 184 Bridge.
- 3. Little Toccoa Creek watershed.
- 4. Middle Fork Broad River watershed upstream from SCS flood control structure #44 to USFS Route 92-B.
- 5. North Fork Broad River watershed upstream from SCS flood control structure #1.
- 6. Panther Creek watershed downstream from the mouth of Davidson Creek.
- 7. Toccoa Creek upstream from Toccoa Falls.

TOWNS COUNTY

Primary:

- 1. Brasstown Creek watershed.
- 2. Chattahoochee River watershed.
- 3. Gumlog Creek watershed.
- 4. Hiawassee River watershed entire stream and all tributaries classified as primary except all streams or sections thereof classified as secondary.
- 5. Tallulah River watershed.
- 6. Winchester Creek watershed.

Secondary:

1. Hightower Creek downstream from the mouth of Little Hightower Creek.

UNION COUNTY

Primary:

- 1. Arkaqua Creek watershed.
- 2. Brasstown Creek watershed.
- 3. Chattahoochee River watershed.

- 4. Conley Creek watershed upstream from Road S2325.
- 5. Coosa Creek watershed upstream from mouth of Anderson Creek.
- 6. Dooley Creek watershed.
- 7. East Fork Wolf Creek watershed upstream from Lake Trahlyta.
- 8. Gumlog Creek watershed.
- 9. Ivylog Creek watershed upstream from USDA Forest Service property line.
- 10. Nottley River watershed upstream from the mouth of Town Creek.
- 11. Toccoa River watershed.
- 12. Town Creek watershed.
- 13. West Fork Wolf Creek watershed.
- 14. Youngcane Creek watershed upstream from the mouth of Jones Creek.

Secondary:

1. All streams or sections thereof except the Butternut Creek watershed and the Nottely River downstream of Nottely Dam and those classified as primary.

WALKER COUNTY

Primary:

- 1. Furnace Creek watershed.
- 2. Harrisburg Creek watershed (including Dougherty Creek and Allen Creek) upstream from Dougherty Creek.

Secondary:

- 1. Chappel Creek watershed.
- 2. Concord Creek watershed.
- 3. Dry Creek watershed (tributary to East Armuchee Creek).
- 4. Duck Creek watershed.

- 5. East Armuchee Creek watershed upstream from Georgia Hwy. 136.
- 6. East Fork Little River watershed (flows into Dade County).
- 7. East Fork Little River watershed (flows into Chattooga County; includes Gilreath Creek).
- 8. Gulf Creek watershed.
- 9. Johns Creek watershed.
- 10. Left Fork Coulter Branch watershed.
- 11. Little Chickamauga Creek watershed.
- 12. Middle Fork Little River watershed (includes Cannon Branch and Hale Branch).
- 13. Rock Creek watershed (including Sawmill Branch) upstream from Sawmill Branch.
- 14. Ruff Creek watershed.
- 15. Snake Creek watershed.
- 16. West Armuchee Creek watershed.
- 17. West Chickamauga Creek watershed upstream from Walker County Road 107.
- 18. West Fork Little River watershed.
- 19. Chattanooga Creek watershed upstream of Walker County Road 235.

WHITE COUNTY

Primary:

- 1. Cathey Creek watershed upstream from the Arrowhead Campground Lake.
- 2. Chattahoochee River watershed upstream from Georgia Hwy. 255 Bridge.
- 3. Town Creek watershed upstream from the mouth of Jenny Creek.

Secondary:

1. Chattahoochee River watershed upstream from Georgia Hwy. 115 to the Georgia Hwy. 255 Bridge.

- 2. Little Tesnatee Creek watershed upstream from the mouth of Turner Creek.
- 3. Turner Creek watershed except as listed under primary above (Turner Creek nearest to Cleveland city limits).

WHITFIELD COUNTY

Primary:

None.

Secondary:

- 1. Coahulla Creek watershed upstream from Whitfield County Road 183.
- 2. East Armuchee Creek watershed.
- 3. Snake Creek watershed.
- 4. Spring Creek watershed.
- 5. Swamp Creek watershed upstream from Whitfield County Road 9.
- 6. Tiger Creek watershed.
- 7. Dry Creek watershed.
- (16) **Waters Generally Supporting Shellfish.** Waters designated by the Coastal Resources Division as productive shellfish waters (currently producing or with the potential to produce shellfish) are opened and closed according to State Law and the requirements of the National Shellfish Sanitation Program Manual of Operations. For a current listing of open productive shellfish waters, contact the Coastal Resources Division. Specific water reaches generally supporting shellfish are as follows:

CHATHAM COUNTY

- 1. Savannah River South Channel at Fort Pulaski to confluence with Lazaretto Creek.
- 2. Tybee River at confluence with Bates Creek and eastward, including Bates Creek.
- 3. Wilmington River at confluence with Herb River and eastward.
- 4. Herb River at confluence with Wilmington River to County Road 890.
- 5. All waters surrounding Skidaway Island including Moon River North to Skidaway Island Road.

- 6. Vernon River at Vernonburg and eastward.
- 7. Little Ogeechee River from Rose Dhu Island and eastward excluding Harvey Creek on Harvey's Island.
- 8. Ogeechee River below Shad Island and eastward (north of center line).
- 9. All waters surrounding Ossabaw Island and Wassaw Island to the center line of the intracoastal waterway.

BRYAN COUNTY

- 1. Ogeechee River below Shad Island and eastward (south of center line).
- 2. Redbird Creek at Cottonham and eastward.
- 3. All waters west of main channel center line of intracoastal waterway to confluence of Medway River.
- 4. Medway River at south confluence of Sunbury Channel and East Channel and eastward (north of center line).

LIBERTY COUNTY

- 1. Medway River at south confluence of Sunbury Channel and East Channel and eastward (south of center line).
- 2. Dickinson Creek at Latitude 31.º44.2′ to confluence with Medway River.
- 3. Johns Creek at end of County Road 3 and eastward to confluence with Medway River.
- 4. All other waters east and north of Colonels Island.
- 5. North Newport River System at confluence with Carrs Neck Creek and eastward, including Cross Tide Creek.
- 6. South Newport River System north of center line and eastward form confluence with South Hampton Creek.

MCINTOSH COUNTY

1. South Newport River System south of centerline and eastward from confluence with South Hampton Creek.

- 2. Julienton River at Latitude 31'36.8' and eastward to confluence with Sapelo River, including Broad River near Shellman Bluff.
- 3. Sapelo River from end of County Road 127 eastward excluding White Chimney River and Savannah Cut.
- 4. All waters surrounding Creighton Island.
- 5. Atwood Creek at Latitude 31° 28.3′Œ and eastward.
- 6. Hudson Creek at Latitude 31° 27.2′Œ and eastward.
- 7. Carnigan River at Latitude 31° 26.2′Œ and eastward.
- 8. All waters surrounding Sapelo Island to the center line of Sapelo Sound, including New Teakettle Creek, Old Teakettle Creek and Dark Creek.
- 9. Dead River at Longitude 81° 21.5′Œ to confluence with Folly River.
- 10. Folly River at Longitude 81° 21.2′Œ to confluence with intracoastal waterways including Fox Creek tributary.
- 11. North River from confluence with Old Darien River to confluence with intracoastal waterway, including Old Darien River.
- 12. Darien River from confluence with Three Mile Cut to intracoastal waterway.
- 13. Rockdedundy River from confluence with Darien River to intracoastal waterway.
- 14. All waters surrounding Doboy Island, Commodore Island, Wolf Island, and Rockdedundy Island.
- 15. South River at confluence of intracoastal waterway to Doboy Sound.
- 16. Altamaha River from confluence with Three Mile Cut and Mackay River and eastward, including Buttermilk Sound, but excluding South Altamaha River.
- 17. Dog Hammock to confluence with Sapelo River.
- 18. Eagle Creek to confluence with Mud River.

GLYNN COUNTY

1. Mackay River water system from confluence with South Altamaha River to confluence with Brunswick River, excluding Wally's Leg.

- 2. All waters surrounding St. Simons Island and Little St. Simons Island.
- 3. All waters surrounding Andrews Island excluding Academy Creek.
- 4. Turtle River from confluence with Buffalo River to confluence with South Brunswick River, excluding Cowpen Creek, Yellow Bluff Creek, and Gibson Creek.
- 5. South Brunswick River and drainage system to confluence of Brunswick River.
- 6. Fancy Bluff Creek from confluence with South Brunswick River to the Little Satilla River.
- 7. Brunswick River from confluence of Turtle River and South Brunswick River to St. Simons Sound.
- 8. Little Satilla River from confluence with Fancy Bluff Creek to St. Andrews Sound (north of center line).
- 9. All waters surrounding Jekyll Island, Jointer Island, and Colonels Island.

CAMDEN COUNTY

- 1. Little Satilla River from confluence with Fancy Bluff Creek to St. Andrews Sound (south of center line), excluding Maiden Creek.
- 2. Umbrella Creek from confluence with Dover Creek below Dover Bluff.
- 3. Dover Creek from confluence with Umbrella Creek to confluence with Satilla River.
- 4. Satilla River near Floyd Basin and unnamed cut over to Dover Creek to St. Andrews Sound.
- 5. Floyd Basin at confluence with Todd Creek to confluence with Satilla River.
- 6. Floyd Basin at confluence with Todd Creek to confluence with Cumberland River.
- 7. Black Point Creek south of Latitude 30° 52.0 Œ south to Crooked River.
- 8. Crooked River from Crooked River State Park to Cumberland River.
- 9. Cumberland River from confluence of St. Andrews Sound to confluence with St. Marys River (north of center line).
- 10. North River from County Road 75 to confluence with St. Marys River.
- 11. All waters surrounding Cumberland Island.

- 12. St. Marys River (north of center line) from end of State Road 40 to Cumberland Sound.
- (17) **Specific Criteria for Lakes and Major Lake Tributaries.** In addition to the general criteria, the following lake specific criteria are deemed necessary and shall be required for the specific water usage as shown:
- (a) West Point Lake: Those waters impounded by West Point Dam and downstream of U.S. 27 at Franklin.
- (i) Chlorophyll a: For the months of April through October, the average of monthly photic zone composite samples shall not exceed 27 µg/l at the LaGrange Water Intake.
- (ii) pH: Within the range of 6.0-9.5.
- (iii) Total Nitrogen: Not to exceed 4.0 mg/l as nitrogen in the photic zone.
- (iv) Phosphorus: Total lake loading shall not exceed 2.4 pounds per acre foot of lake volume per year.
- (v) Fecal Coliform Bacteria:
- 1. U.S. 27 at Franklin to New River: Fecal coliform bacteria shall not exceed the Fishing criterion as presented in 391-3-6-.03(6)(c).
- 2. New River to West Point Dam: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b).
- (vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(f).
- (vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).
- (viii) Major Lake Tributaries: For the following tributaries, the annual total phosphorus loading to West Point Lake shall not exceed the following:
- 1. Yellow Jacket Creek at Hammet Road: 11,000 pounds.
- 2. New River at Hwy 100: 14,000 pounds.
- 3. Chattahoochee River at U.S. 27: 1,400,000 pounds.
- (b) Lake Walter F. George: Those waters impounded by Walter F. George Dam and upstream to Georgia Highway 39 near Omaha.

- (i) Chlorophyll a: For the months of April through October, the average of monthly photic zone composite samples shall not exceed 18 μ g/l at mid-river at U.S. Highway 82 or 15 μ g/l at mid-river in the dam forebay.
- (ii) pH: Within the range of 6.0-9.5 standard units.
- (iii) Total Nitrogen: Not to exceed 3.0 mg/l as nitrogen in the photic zone.
- (iv) Phosphorous: Total lake loading shall not exceed 2.4 pounds per acre-foot of lake volume per year.
- (v) Fecal Coliform:
- 1. Georgia Highway 39 to Cowikee Creek: Fecal coliform bacteria shall not exceed the Fishing criterion as presented in 391-3-6-.03(6)(c)(iii).
- 2. Cowikee Creek to Walter F. George Dam: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(i).
- (vi) Dissolved Oxygen: A daily average of no less than 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391- 3-6-.03(5)(f).
- (vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).
- (viii) Major Lake Tributary: The annual total phosphorous loading to Lake Walter F. George, monitored at the Chattahoochee River at Georgia Highway 39, shall not exceed 2,000,000 pounds.
- (c) Lake Jackson: Those waters impounded by Lloyd Shoals Dam and upstream to Georgia Highway 36 on the South and Yellow Rivers, upstream to Newton Factory Bridge Road on the Alcovy River and upstream to Georgia Highway 36 on Tussahaw Creek.
- (i) Chlorophyll a: For the months of April through October, the average of monthly midchannel photic zone composite samples shall not exceed 20 µg/l at a location approximately 2 miles downstream of the confluence of the South and Yellow Rivers at the junction of Butts, Newton and Jasper Counties.
- (ii) pH: Within the range of 6.0-9.5 standard units.
- (iii) Total Nitrogen: Not to exceed 4.0 mg/l as nitrogen in the photic zone.
- (iv) Phosphorous: Total lake loading shall not exceed 5.5 pounds per acre-foot of lake volume per year.

- (v) Fecal Coliform: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(i).
- (vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(f).
- (vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).
- (viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading to Lake Jackson shall not exceed the following:

1. South River at Island Shoals: 179,000 pounds.

2. Yellow River at Georgia Highway 212: 116,000 pounds.

3. Alcovy River at Newton Factory Bridge Road: 55,000 pounds.

4. Tussahaw Creek at Fincherville Road: 7,000 pounds.

- (d) Lake Allatoona: Those waters impounded by Allatoona Dam and upstream to State Highway 5 on the Etowah River, State Highway 5 on Little River, the Lake Acworth Dam, and the confluence of Little Allatoona Creek and Allatoona Creek. Other impounded tributaries to an elevation of 840 feet mean sea level corresponding to the normal pool elevation of Lake Allatoona.
- (i) Chlorophyll a: For the months of April through October, the average monthly midchannel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below:

1. Upstream from the Dam 10 μg/l

2. Allatoona Creek upstream from I-75 10 μg/l

3. Mid-Lake downstream from Kellogg Creek 10 µg/l

4. Little River upstream from Highway 205 15 μg/l

5. Etowah River upstream from Sweetwater Creek 12 μg/l

- (ii) pH: Within the range of 6.0-9.5 standard units.
- (iii) Total Nitrogen: Not to exceed 4 mg/l as nitrogen in the photic zone.
- (iv) Phosphorous: Total lake loading shall not exceed 1.3 pounds per acre-foot of lake volume per year.

- (v) Fecal Coliform:
- 1. Etowah River, State Highway 5 to State Highway 20: Fecal coliform bacteria shall not exceed the Fishing Criterion as presented in 391-3-6-.03(6)(c)(iii).
- 2. Etowah River, State Highway 20 to Allatoona Dam: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(i).
- (vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(g).
- (vii) Temperature:
- 1. Etowah River, State Highway 5 to State Highway 20: Water temperature shall not exceed the Fishing criterion as presented in 391-3-6-.03(6)(c)(iv).
- 2. Etowah River, State Highway 20 to Allatoona Dam: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv). (viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading to Lake Allatoona shall not exceed the following:

1. Etowah River at State Highway 5 spur and 140, at the USGS gage 340,000 lbs/yr

2. Little River at State Highway 5 (Highway 754) 42,000 lbs/yr

3. Noonday Creek at North Rope Mill Road 38,000 lbs/yr

4. Shoal Creek at State Highway 108 (Fincher Road) 9,200 lbs/yr

- (e) Lake Sidney Lanier: Those waters impounded by Buford Dam and upstream to Belton Bridge Road on the Chattahoochee River, 0.6 miles downstream from State Road 400 on the Chestatee River, as well as other impounded tributaries to an elevation of 1070 feet mean sea level corresponding to the normal pool elevation of Lake Sidney Lanier.
- (i) Chlorophyll a: For the months of April through October, the average of monthly midchannel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below:

1. Upstream from the Buford Dam forebay 5 μg/l

2. Upstream from the Flowery Branch confluence 5 μg/l

3. At Browns Bridge Road (State Road 369) 5 µg/l

4. At Bolling Bridge (State Road 53) on Chestatee River 10 μg/l

- 5. At Lanier Bridge (State Road 53) on Chattahoochee
 River 10 μg/l
- (ii) pH: Within the range of 6.0-9.5 standard units.
- (iii) Total Nitrogen: Not to exceed 4 mg/l as nitrogen in the photic zone.
- (iv) Phosphorous: Total lake loading shall not exceed 0.25 pounds per acre-foot of lake volume per year.
- (v) Fecal Coliform: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(i).
- (vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(g).
- (vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).
- (viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading to Lake Sidney Lanier shall not exceed the following:
- 1. Chattahoochee River at Belton Bridge Road 178,000 pounds
- 2. Chestatee River at Georgia Highway 400 118,000 pounds
- 3. Flat Creek at McEver Road 14,400 pounds
- (f) Carters Lake: Those waters impounded by Carters Dam and upstream on the Coosawattee River as well as other impounded tributaries to an elevation of 1072 feet mean sea level corresponding to the normal pool elevation of Carters Lake.
- (i) Chlorophyll a: For the months of April through October, the average of monthly midchannel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below:
- 1. Carters Lake upstream from Woodring Branch 5 μg/l
- 2. Carters Lake at Coosawattee River embayment mouth 10 μg/l
- (ii) pH: Within the range of 6.0-9.5 standard units.
- (iii) Total Nitrogen: Not to exceed 4.0 mg/l as nitrogen in the photic zone.

- (iv) Phosphorous: Total lake loading shall not exceed 172,500 pounds or 0.46 pounds per acre-foot of lake volume per year.
- (v) Fecal Coliform: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(i).
- (vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(g).
- (vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).
- (viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading at the compliance monitoring location shall not exceed the following:
- 1. Coosawattee River at Old Highway 5

151,500 pounds

2. Mountaintown Creek at U.S. Highway 76 8,000 pounds (18) **Effective Date.** This rule shall become effective twenty days after filing with the Secretary of State's office.

Authority O.C.G.A. Sec. 12-5-20 et seq. History. Original Rule entitled "Water Use Classifications and Water Quality Standards" adopted. F. June 10, 1974; eff. June 30, 1974. Amended: F. May 30, 1985; eff. June 19, 1985. Amended: F. Dec. 9, 1988; eff. Dec. 29, 1988. Amended: F. May 31, 1989; eff. June 20, 1989. Amended: ER. 391- 3-6-0.16-.03 adopted. F. July 6, 1989; eff. June 30, 1989, the date of adoption. **Amended:** ER. 391-3-6-0.17-.03 adopted. F. Aug. 25, 1989, eff. Aug. 23, 1989, the date of adoption. **Amended:** ER. 391-3-6-0.19-.03 adopted. F. Dec. 8, 1989, eff. Dec. 6, 1989, the date of adoption. Amended: F. Dec. 8, 1989; eff. Dec. 28, 1989. Amended: F. Apr. 3, 1990; eff. Apr. 23, 1990. Amended: F. Feb. 15, 1991; eff. Mar. 7, 1991. **Amended:** F. Apr. 8, 1993; eff. Apr. 28, 1993. **Amended:** F. Aug. 9, 1993; eff. Aug. 29, 1993. Amended: F. Aug. 30, 1995; eff. Sept. 19, 1995. Amended: ER. 391-3-6-0.32-.03 adopted. F. May 1, 1996; eff. Apr. 25, 1996, the date of adoption. Amended: Permanent Rule adopted. F. July 10, 1996; eff. July 30, 1996. Amended: F. Oct. 17, 1996; eff. Nov. 6, 1996. Amended: F. May 2, 1997; eff. May 22, 1997. Amended: F. Nov. 3, 1998; eff. Nov. 23, 1998. Amended: F. Feb. 7, 2000; eff. Feb. 27, 2000. Amended: F. Apr. 12, 2000; eff. May 2, 2000. Amended: F. Oct. 26, 2001; eff. Nov. 15, 2001. Amended: F. May 10, 2002; eff. May 30, 2002. Amended: F. July 2, 2002; eff. July 22, 2002. Amended: F. Dec. 9, 2002; eff. Dec. 29, 2002. Amended: F. Nov. 7, 2005; eff. Nov. 27, 2005. Amended: F. Dec. 14, 2007; eff. Jan. 3, 2008.