

Presented below are water quality standards that are in effect for Clean Water Act purposes.

EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.

Rule 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) The following paragraphs describe the three tiers of the State's waters.
 - (i) Tier 1 - Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
 - (ii) Tier 2 - 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.
 - (iii) Tier 3 - 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 aesthetic, historic, recreational, or ecological significance. For waters designated as ONRW, existing water quality shall be maintained and protected. The following waters below are designated as ONRWs:

Conasauga River within the Cohutta Wilderness Area of the Chattahoochee National Forest (headwaters to Forest Service Road 17).

1. 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.
2. Existing point source discharges to ONRW shall be allowed, provided they are treated or controlled in accordance with applicable laws and regulations.

3. New point source discharges or expansions of existing point source discharges to waters upstream of, or tributary to, ONRW 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.
 4. Activities that result in short-term, temporary, and limited changes to water quality may be allowed if authorized by the Division and the water quality is returned or restored to conditions equal to or better than those existing prior to the activities.
- (c) 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.
- (d) 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.
- (e) Variance. Variances are a temporary modification to the designated use and associated criteria. Variances may be written for a specific geographic area, pollutant, or source. The State may issue variances that can provide relief to a permittee while they upgrade their facility to meet the standard. Variances are based on a use attainability demonstration, which requires a scientific assessment of factors affecting the attainment of a standard. Variances target achievement of the highest attainable water quality standard, must be reviewed every three years, and do not allow for a reduction in treatment efforts. 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 operate 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.
- (f) 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. This is done through a use attainability analysis. The use attainability analysis is a scientific assessment of factors affecting the attainment of a use and may include physical, chemical, biological and/or economic factors. A detailed analysis is required demonstrating that certain conditions are met indicating that the designated use cannot be met and should be removed. The use attainability analysis should be conducted in accordance with the US EPA Technical Support Manual: *Waterbody Surveys and Assessments for Conducting Use Attainability Analyses* and /or any State guidance documents. The factors that can be used are as follows:
- (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 operate 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.

- (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 mathematical models, or any other procedure deemed appropriate by the Director.
 - (i) "Naturally variable parameters." It is recognized that certain parameters including dissolved oxygen, pH, bacteria, turbidity and water temperature, vary through a given period of time (such as daily or seasonally) due to natural conditions. Assessment of State waters may allow for a 10% excursion frequency for these parameters.
 - (j) "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.

- (k) "Secondary contact recreation" is incidental contact with the water, wading, and occasional swimming.
 - (l) "Shellfish" refers to clams, oysters, scallops, mussels, and other bivalve mollusks.
 - (m) "Significant Figures." The number of "significant figures" represented in numeric criteria are the number of figures or digits that have meaning as estimated from the accuracy and precision with which the quantity was measured and the data were rounded off. Technical guidance on significant figures, including rules for rounding off following mathematical operations, is provided in the publication entitled *Standard Methods for the Examination of Water and Wastewater*, in "Part 1050 Expression of Results, B. Significant Figures" (American Public Health Association (APHA), American Water Works Association (AWWA), and Water Environment Federation (WEF); 18th, 19th, 20th, or subsequent Editions).
 - (n) "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.
 - (o) "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 area 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 multi-parametric 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 near-bottom 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:

1. 2,4-Dichlorophenoxyacetic acid (2,4-D)	70 µg/L
2. Methoxychlor	0.03 µg/L*
3. 2,4,5-Trichlorophenoxy propionic acid (TP Silvex)	50 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.

	Acute	Chronic
1. Arsenic		
(a) Freshwater	340 µg/L ¹	150 µg/L ¹
(b) Coastal and Marine Estuarine Waters	69 µg/L ¹	36 µg/L ¹
2. Cadmium		
(a) Freshwater	1.0 µg/L ^{1,3}	0.15 µg/L ^{1,3}
(b) Coastal and Marine Estuarine Waters	40 µg/L ¹	8.8 µg/L ¹
3. Chromium III		
(a) Freshwater	320 µg/L ^{1,3}	42 µg/L ^{1,3}
(b) Coastal and Marine Estuarine Waters	--	--
4. Chromium VI		
(a) Freshwater	16 µg/L ¹	11 µg/L ¹
(b) Coastal and Marine Estuarine Waters	1,100 µg/L ¹	50 µg/L ¹
5. Copper		
(a) Freshwater	7.0 µg/L ^{1,2*,3}	5.0 µg/L ^{1,2*,3}
(b) Coastal and Marine Estuarine Waters	4.8 µg/L ^{1,2}	3.1 µg/L ^{1,2}
6. Lead		
(a) Freshwater	30 µg/L ^{1,3}	1.2 µg/L ^{1,2*,3}
(b) Coastal and Marine Estuarine Waters	210 µg/L ¹	8.1 µg/L ¹
7. Mercury		
(a) Freshwater	1.4 µg/L	0.012 µg/L ₂
(b) Coastal and Marine Estuarine Waters	1.8 µg/L	0.025 µg/L ₂
8. Nickel		
(a) Freshwater	260 µg/L ^{1,3}	29 µg/L ^{1,3}
(b) Coastal and Marine Estuarine Waters	74 µg/L ¹	8.2 µg/L ¹
9. Selenium		

	(a) Freshwater	--	5.0 µg/L
	(b) Coastal and Marine Estuarine Waters	290 µg/L ¹	71 µg/L ¹
10.	Silver	-- ⁴	-- ⁴
11.	Zinc		
	(a) Freshwater	65 µg/L ^{1,3}	65 µg/L ^{1,3}
	(b) Coastal and Marine Estuarine Waters	90 µg/L ¹	81 µg/L ¹
12.	Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]		
	(a) Freshwater	0.95 µg/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 - EPA 2006.

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 freshwater 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 - EPA 2006 should be used.

⁴ This pollutant is addressed in [391-3-6-.06](#).

Cadmium

acute criteria = $(e^{(1.0166[\ln(\text{hardness})] - 3.924)})(1.136672 - [(\ln \text{hardness})(0.041838)]) \mu\text{g/L}$

chronic criteria = $(e^{(0.7409[\ln(\text{hardness})] - 4.719)})(1.101672 - [(\ln \text{hardness})(0.041838)]) \mu\text{g/L}$

Chromium III

acute criteria = $(e^{(0.8190[\ln(\text{hardness})] + 3.7256)})(0.316) \mu\text{g/L}$

chronic criteria = $(e^{(0.8190[\ln(\text{hardness})] + 0.6848)})(0.860) \mu\text{g/L}$

Copper

acute criteria = $(e^{(0.9422[\ln(\text{hardness})] - 1.700)})(0.96) \mu\text{g/L}$

$$\text{chronic criteria} = (e^{(0.8545[\ln(\text{hardness})] - 1.702)})(0.96) \mu\text{g/L}$$

Site-specific Copper criteria developed using the biotic ligand model (BLM):

Buffalo Creek (Richards Lake Dam to confluence with Little Tallapoosa River):

$$\text{Acute criteria} = 4.9 \times 10^8 e^{\left(-0.5 \left(\left(\frac{(\ln(\text{pH}) - 7.526)^2}{-0.1826} \right) + \left(\frac{(\ln(\text{DOC}) - 32.28)^2}{-3.433} \right) \right) \right)}$$

$$\text{Chronic criteria} = 3.043 \times 10^8 e^{\left(-0.5 \left(\left(\frac{(\ln(\text{pH}) - 7.526)^2}{-0.1826} \right) + \left(\frac{(\ln(\text{DOC}) - 32.28)^2}{-3.433} \right) \right) \right)}$$

Lead

$$\text{acute criteria} = (e^{(1.273[\ln(\text{hardness})] - 1.460)})(1.46203 - [(\ln(\text{hardness}) - 0.145712)]) \mu\text{g/L}$$

$$\text{chronic criteria} = (e^{(1.273[\ln(\text{hardness})] - 4.705)})(1.46203 - [(\ln(\text{hardness}) - 0.145712)]) \mu\text{g/L}$$

Nickel

$$\text{acute criteria} = (e^{(0.8460[\ln(\text{hardness})] + 2.255)})(0.998) \mu\text{g/L}$$

$$\text{chronic criteria} = (e^{(0.8460[\ln(\text{hardness})] + 0.0584)})(0.997) \mu\text{g/L}$$

Zinc

$$\text{acute criteria} = (e^{(0.8473[\ln(\text{hardness})] + 0.884)})(0.978) \mu\text{g/L}$$

$$\text{chronic criteria} = (e^{(0.8473[\ln(\text{hardness})] + 0.884)})(0.986) \mu\text{g/L}$$

- (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 (CAS RN¹ 57749)

(a) Freshwater

0.0043 $\mu\text{g/L}^*$

	(b) Coastal and Marine Estuarine Waters	0.004 µg/L*
2.	Cyanide (CAS RN ¹ 57125)	
	(a) Freshwater	5.2 µg/L*
	(b) Coastal and Marine Estuarine Waters	1.0 µg/L*
3.	Dieldrin (CAS RN ¹ 60571)	
	(a) Freshwater	0.056 µg/L*
	(b) Coastal and Marine Estuarine Waters	0.0019 µg/L*
4.	4,4'-DDT (CAS RN ¹ 50293)	0.001 µg/L*
5.	a-Endosulfan (CAS RN ¹ 959988)	
	(a) Freshwater	0.056 µg/L*
	(b) Coastal and Marine Estuarine Waters	0.0087 µg/L*
6.	b-Endosulfan (CAS RN ¹ 33213659)	
	(a) Freshwater	0.056 µg/L*
	(b) Coastal and Marine Estuarine Waters	0.0087 µg/L*
7.	Endrin (CAS RN ¹ 72208)	
	(a) Freshwater	0.036 µg/L*
	(b) Coastal and Marine Estuarine Waters	0.0023 µg/L*
8.	Heptachlor (CAS RN ¹ 76448)	
	(a) Freshwater	0.0038 µg/L*
	(b) Coastal and Marine Estuarine Waters	0.0036 µg/L*
9.	Heptachlor Epoxide (CAS RN ¹ 1024573)	
	(a) Freshwater	0.0038 µg/L*
	(b) Coastal and Marine Estuarine Waters	0.0036 µg/L*
10.	Pentachlorophenol (CAS RN ¹ 87865)	
	(a) Freshwater ²	15 µg/L ^{2,*}
	(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 (CAS RN ¹ 108952)	300 µg/L
13.	Toxaphene (CAS RN ¹ 8001352)	0.0002 µg/L*

¹"CAS RN" or the Chemical Abstract Service (CAS) Registry Number is a unique numerical identifier assigned to each chemical and some chemical mixtures.

²The instream freshwater criterion for pentachlorophenol is a function of pH, determined by the formula ($e^{(1.005(\text{pH}) - 5.134)}$). At a pH equal to 7.8 standard units the criterion is 15 µg/L.

*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 (CAS RN ¹ 83329)	990 µg/L
2. Acenaphthylene (CAS RN ¹ 208968)	**
3. Acrolein (CAS RN ¹ 107028)	9.3 µg/L
4. Acrylonitrile (CAS RN ¹ 107131)	0.25 µg/L
5. Aldrin (CAS RN ¹ 309002)	0.000050 µg/L
6. Anthracene (CAS RN ¹ 120127)	40000 µg/L
7. Antimony	640 µg/L
8. Arsenic (Total)	
(a) Drinking Water Supplies	10 µg/L
(b) All Other Classifications	50 µg/L
9. Benzidine (CAS RN ¹ 92875)	0.0002 µg/L
10. Benzo(a)Anthracene (CAS RN ¹ 56553)	0.018 µg/L
11. Benzo(a)Pyrene (CAS RN ¹ 50328)	0.018 µg/L
12. 3,4-Benzofluoranthene (CAS RN ¹ 205992)	0.018 µg/L
13. Benzene (CAS RN ¹ 71432)	51 µg/L
14. Benzo(ghi)Perylene (CAS RN ¹ 191242)	**
15. Benzo(k)Fluoranthene (CAS RN ¹ 207089)	0.018 µg/L
16. Beryllium	**
17. a-BHC-Alpha (CAS RN ¹ 319846)	0.0049 µg/L
18. b-BHC-Beta (CAS RN ¹ 319857)	0.017 µg/L
19. Bis(2-Chloroethyl)Ether (CAS RN ¹ 111444)	0.53 µg/L
20. Bis(2-Chloroisopropyl)Ether (CAS RN ¹ 108601)	65000 µg/L
21. Bis(2-Ethylhexyl)Phthalate (CAS RN ¹ 117817)	2.2 µg/L
22. Bromoform (Tribromomethane) (CAS RN ¹ 75252)	140 µg/L
23. Butylbenzyl Phthalate (CAS RN ¹ 85687)	1900 µg/L
24. CarbonTetrachloride (CAS RN ¹ 56235)	1.6 µg/L
25. Chlorobenzene (CAS RN ¹ 108907)	1600 µg/L
26. Chlorodibromomethane (CAS RN ¹ 124481)	13 µg/L
27. 2-Chloroethylvinyl Ether (CAS RN ¹ 110758)	**
28. Chlordane (CAS RN ¹ 57749)	0.00081 µg/L
29. Chloroform (Trichloromethane) (CAS RN ¹ 67663)	470 µg/L
30. 2-Chloronaphthalene (CAS RN ¹ 91587)	1600 µg/L
31. 2-Chlorophenol (CAS RN ¹ 95578)	150 µg/L
32. Chrysene (CAS RN ¹ 218019)	0.018 µg/L
33. Dibenzo(a,h)Anthracene (CAS RN ¹ 53703)	0.018 µg/L
34. Dichlorobromomethane (CAS RN ¹ 75274)	17 µg/L
35. 1,2-Dichloroethane (CAS RN ¹ 107062)	37 µg/L
36. 1,1-Dichloroethylene (CAS RN ¹ 75354)	7100 µg/L
37. 1,2 - Dichloropropane (CAS RN ¹ 78875)	15 µg/L

38. 1,3-Dichloropropylene (CAS RN ¹ 542756)	21 µg/L
39. 2,4-Dichlorophenol (CAS RN ¹ 120832)	290 µg/L
40. 1,2-Dichlorobenzene (CAS RN ¹ 95501)	1300 µg/L
41. 1,3-Dichlorobenzene (CAS RN ¹ 541731)	960 µg/L
42. 1,4-Dichlorobenzene (CAS RN ¹ 106467)	190 µg/L
43. 3,3'-Dichlorobenzidine (CAS RN ¹ 91941)	0.028 µg/L
44. 4,4'-DDT (CAS RN ¹ 50293)	0.00022 µg/L
45. 4,4'-DDD (CAS RN ¹ 72548)	0.00031 µg/L
46. 4,4'-DDE (CAS RN ¹ 72559)	0.00022 µg/L
47. Dieldrin (CAS RN ¹ 60571)	0.000054 µg/L
48. Diethyl Phthalate (CAS RN ¹ 84662)	44000 µg/L
49. Dimethyl Phthalate(CAS RN ¹ 131113)	1100000 µg/L
50. 2,4-Dimethylphenol (CAS RN ¹ 105679)	850 µg/L
51. 2,4-Dinitrophenol (CAS RN ¹ 51285)	5300 µg/L
52. Di-n-Butyl Phthalate (CAS RN ¹ 84742)	4500 µg/L
53. 2,4-Dinitrotoluene (CAS RN ¹ 121142)	3.4 µg/L
54. 1,2-Diphenylhydrazine (CAS RN ¹ 122667)	0.20 µg/L
55. Endrin (CAS RN ¹ 72208)	0.060 µg/L
56. Endrin Aldehyde (CAS RN ¹ 7421934)	0.30 µg/L
57. alpha - Endosulfan (CAS RN ¹ 959988)	89 µg/L
58. beta - Endosulfan (CAS RN ¹ 33213659)	89 µg/L
59. Endosulfan Sulfate (CAS RN ¹ 1031078)	89 µg/L
60. Ethylbenzene (CAS RN ¹ 100414)	2100 µg/L
61. Fluoranthene (CAS RN ¹ 206440)	140 µg/L
62. Fluorene (CAS RN ¹ 86737)	5300 µg/L
63. Heptachlor (CAS RN ¹ 76448)	0.000079 µg/L
64. Heptachlor Epoxide (CAS RN ¹ 1024573)	0.000039 µg/L
65. Hexachlorobenzene (CAS RN ¹ 118741)	0.00029 µg/L
66. Hexachlorobutadiene (CAS RN ¹ 87683)	18 µg/L
67. Hexachlorocyclopentadiene (CAS RN ¹ 77474)	1100 µg/L
68. Hexachloroethane (CAS RN ¹ 67721)	3.3 µg/L
69. Indeno(1,2,3-cd)Pyrene (CAS RN ¹ 193395)	0.018 µg/L
70. Isophorone (CAS RN ¹ 78591)	960 µg/L
Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]	
71. (CAS RN ¹ 58899)	1.8 µg/L
72. Methyl Bromide (Bromomethane) (CAS RN ¹ 74839)	1500 µg/L
73. Methyl Chloride (Chloromethane) (CAS RN ¹ 74873)	**
74. Methylene Chloride (CAS RN ¹ 75092)	590 µg/L
75. 2-Methyl-4,6-Dinitrophenol (CAS RN ¹ 534521)	280 µg/L
76. 3-Methyl-4-Chlorophenol (CAS RN ¹ 59507)	**
77. Nitrobenzene (CAS RN ¹ 98953)	690 µg/L

78. N-Nitrosodimethylamine (CAS RN ¹ 62759)	3.0 µg/L
79. N-Nitrosodi-n-Propylamine (CAS RN ¹ 621647)	0.51 µg/L
80. N-Nitrosodiphenylamine (CAS RN ¹ 86306)	6.0 µg/L
81. PCBs	0.000064 µg/L
82. Pentachlorophenol (CAS RN ¹ 87865)	3.0 µg/L
83. Phenanthrene (CAS RN ¹ 85018)	**
84. Phenol (CAS RN ¹ 108952)	857000 µg/L
85. Pyrene (CAS RN ¹ 129000)	4000 µg/L
86. 1,1,2,2-Tetrachloroethane (CAS RN ¹ 79345)	4.0 µg/L
87. Tetrachloroethylene (CAS RN ¹ 127184)	3.3 µg/L
88. Thallium	0.47 µg/L
89. Toluene (CAS RN ¹ 108883)	5980 µg/L
90. Toxaphene (CAS RN ¹ 8001352)	0.00028 µg/L
91. 1,2-Trans-Dichloroethylene (CAS RN ¹ 156605)	10000 µg/L
92. 1,1,2-Trichloroethane (CAS RN ¹ 79005)	16 µg/L
93. Trichloroethylene (CAS RN ¹ 79016)	30 µg/L
94. 2,4,6-Trichlorophenol (CAS RN ¹ 88062)	2.4 µg/L
95. 1,2,4-Trichlorobenzene (CAS RN ¹ 120821)	70 µg/L
96. Vinyl Chloride (CAS RN ¹ 75014)	2.4 µg/L

¹"CAS RN" or the Chemical Abstract Service (CAS) Registry Number is a unique numerical identifier assigned to each chemical and some chemical mixtures.

** 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 0.000000051 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 mid-depth. 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 these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
 - (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 small mouth 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:

1. Coastal waters: Culturable enterococci not to exceed a geometric mean of 35 CFU (colony forming units) per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 130 CFU per 100 mL the same 30-day interval.
2. All other recreational waters: Culturable E. coli not to exceed a geometric mean of 126 CFU (colony forming units) per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 410 CFU per 100 mL in the same 30-day interval.

- (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:

1. 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 these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
2. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, 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 National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.

(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. All other criteria and uses for the fishing use classification will apply for coastal fishing.

- (i) Dissolved Oxygen: A daily average of 5.0 mg/L and no less than 4.0 mg/L at all times. If it is determined that the "natural condition" in the waterbody is less than the values stated above, then the criteria will revert to the "natural condition" and the water quality standard will allow for a 0.1 mg/L deficit from the "natural" dissolved oxygen value. Up to a 10% deficit will be allowed if it is demonstrated that resident aquatic species shall not be adversely affected.
-
- (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 bacteria. 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)(I) 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) **Bacteria Criteria.** The criteria for bacteria provide the regulatory framework to support the USEPA requirement that States protect all waters for recreational use. The bacterial indicators for primary contact recreational waters are E. coli and enterococci. The bacterial indicator for secondary contact recreational waters is fecal coliform.

- (a) Fecal coliform, E. coli and enterococci bacteria live in the intestinal tract of warm blooded animals including man. These organisms are excreted in extremely high numbers. Pathogenic bacteria also originate in the fecal material of diseased persons. Therefore, waters with high levels of bacteria represent potential problem areas for swimming. Scientific studies indicate there is a positive correlation between E. coli and enterococci counts and gastrointestinal illness. 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 bacterial 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 bacteria have been documented in streams across the nation.

(13) **Acceptance of Data.** Sampling methods for water quality samples collected and reported by any person(s), (including volunteer groups), 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), or most current version, Georgia Department of Natural Resources, Environmental Protection Division, Watershed 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. The Division may use water quality data for screening purposes if it was collected by any person(s), (including volunteer groups), without an approved sampling and quality assurance plan.

(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:

ALTAMAHA

CLASSIFICATION

RIVER BASIN

All littoral waters on the ocean side of Sea and Sapelo Islands, and on the ocean and sound side of St. Simons Island

Recreation

Buttermilk Sound	Reimolds Pasture	Recreation
------------------	------------------	------------

CHATTAHOOCHEE RIVER BASIN

CLASSIFICATION

Alexander Creek	Headwaters to confluence with Cedar Creek	Drinking Water
Bear Creek	Headwaters to confluence with Chattahoochee River	Drinking Water
Big Creek	Foe Killer Creek to Chattahoochee River	Drinking Water
Blue Creek	Headwaters to Yellowjacket Creek	Drinking Water
Camp Creek	Headwaters to confluence with Hazel Creek	Drinking Water
Cedar Creek	Headwaters to Alexander Creek	Drinking Water
Centralhatchee Creek	Little Taylor Creek to Chattahoochee River	Drinking Water
Chattahoochee River	Headwaters to confluence with Soque River	Recreation
Chattahoochee River	Soque River to White Creek	Recreation and Drinking Water
Chattahoochee River	White Creek to Mud Creek	Recreation
Chattahoochee River/Lake Lanier	Mud Creek to Buford Dam	Recreation and Drinking Water
Chattahoochee River	Buford Dam to Atlanta (Peachtree Creek)	Recreation and Drinking Water
Chattahoochee River	Atlanta (Peachtree Creek) to Cedar Creek	Fishing
Chattahoochee River	Pink Creek to Harris Creek	Drinking Water
Chattahoochee River/West Point Lake	New River to West Point Dam	Recreation and Drinking Water
Chattahoochee River	West Point Dam to Long Cane Creek	Drinking Water
Chattahoochee River	House Creek to North Highland Dam (including Lakes Harding, Goat Rock, Oliver, and North Highlands)	Recreation and Drinking Water
Chattahoochee River	Cowikee Creek to Lake Walter F. George Dam	Recreation
Chattahoochee River/Lake Seminole	Georgia Hwy. 91 to Jim Woodruff Dam	Recreation
Dog River	Mobley Creek to Chattahoochee River	Drinking Water
Flat Creek	Turkey Creek to confluence with Yellow jacket Creek	Drinking Water
Hazel Creek	Law Creek to Camp Creek	Drinking Water
Headwaters of Unnamed Tributary to Bethlehem Creek	Lake Franklin, F.D. Roosevelt State Park Beaches	Recreation
Hillabahatchee Creek	Tolieson Branch to Chattahoochee River	Drinking Water

Little Kolomoki Creek	Lake Kolomoki, Kolomoki Mounds State Park Beach	Recreation
Sandy Creek	Headwaters to Golden Creek	Drinking Water
Smith Creek	Unicoi Lake, Unicoi State Park Beach	Recreation
Snake Creek	Crews Creek to Chattahoochee River	Drinking Water
Soque River	Deep Creek to Sutton Mill Creek	Drinking Water
Sweetwater Creek	Olley Creek to Chattahoochee River	Drinking Water
Turner Creek	Headwaters to confluence with Tesnatee Creek	Drinking Water
Upatoi Creek	Heriot Creek to Armory Creek	Drinking Water
Yahoola Creek	Bryant Creek to confluence with Chestatee River	Drinking Water

COOSA RIVER BASIN

CLASSIFICATION

Beech Creek	Headwaters to Dry Creek (including Possum Trot Reservoir)	Drinking Water
Blackwell Creek	Headwaters to Cox Lake Dam	Drinking Water
Cartecay River	Clear Creek to confluence with Ellijay River	Drinking Water
Chestnut Cove Creek	Headwaters to and including Lake Tamarack	Drinking Water
Coahulla Creek	Bates Branch to Mill Creek	Drinking Water
Conasauga River	Waters Within the Cohutta Wilderness Area	Wild and Scenic
Conasauga River	Sugar Creek to Spring Creek	Drinking Water
Coosa River	At the Alabama State Line	Recreation
Coosawattee River/Carters Lake	Confluence with Mountaintown Creek to Carters Dam	Recreation and Drinking Water
Coosawattee River	Mineral Springs Branch to confluence with Conasauga River	Drinking Water
Dry Creek	Headwaters to confluence with Duck Creek	Drinking Water
Duck Creek	Confluence with Dry Creek to Dickson Creek	Drinking Water
Ellijay River	Briar Creek to confluence with Cartecay River	Drinking Water
Etowah River	Headwaters to Montgomery Creek	Drinking Water
Etowah River	Lily Creek to Mill Creek	Drinking Water
Etowah River	Long Swamp Creek to Canton Creek	Drinking Water
Etowah River/Lake Allatoona	Georgia Hwy. 20 to Allatoona Dam	Recreation and Drinking Water
Etowah River	Allatoona Dam to Ward Creek	Drinking Water
Etowah River	Dykes Creek to Silver Creek	Drinking Water

Euharlee Creek	Parham Springs Creek to Fish Creek	Drinking Water
Headwaters of Gold Mine Branch	Fort Mountain Lake, Fort Mountain State Park Beach	Recreation
Holly Creek	Dill Creek to Chicken Creek	Drinking Water
Jacks Creek	Waters Within the Cohutta Wilderness Area	Wild and Scenic
Long Swamp Creek	Lake Tamarack Dam to Cox Creek	Drinking Water
Mill Creek	Hurricane Creek to confluence with Conasauga River	Drinking Water
Oostanaula River	Confluence of Conasauga and Coosawattee Rivers to Oothkalooga Creek	Drinking Water
Oostanaula River	Confluence with Woodward Creek to Coosa River	Drinking Water
Pettit Creek	Headwaters to confluence with Disharoon Creek (including Lake Pettit)	Drinking Water
Raccoon Creek	Headwaters to confluence with Chattooga River	Drinking Water
Tributaries to Heath Creek	Rocky Mountain Public Fishing Lakes, Rocky Mountain Public Fishing Area	Recreation
Tributary of Dakwa Lake	Headwaters to confluence with Turniptown Creek (including Dakwa Lake)	Drinking Water
Woodward Creek	Headwaters to confluence with Oostanaula River	Drinking Water

FLINT RIVER BASIN

CLASSIFICATION

Elkins Creek	Headwaters to Powder Creek	Drinking Water
Flat Creek	Headwaters to confluence with Line Creek (including Lake Kedron and Lake Peachtree)	Drinking Water
Flint River	Swamp Creek to Horton Creek	Drinking Water
Flint River	Birch Creek to Red Oak Creek	Drinking Water
Flint River	Georgia Hwy. 27 to Georgia Power Dam at Lake Worth, Albany including Lakes Blackshear, Chehaw, and Worth	Recreation
Flint River	Bainbridge, U.S. Hwy. 84 Bridge to Jim Woodruff Dam, Lake Seminole	Recreation
Heads Creek	Headwaters to Shoal Creek (including Heads Creek Reservoir)	Drinking Water
Horton Creek	Headwaters to Flint River (including Horton Creek Reservoir)	Drinking Water
Keg Creek	Headwaters to Line Creek (including Hutchins Lake)	Drinking Water

Lazer Creek	Rocky Branch to Gin Creek	Drinking Water
Line Creek	Persimmon Creek to Flat Creek (including Lake McIntosh)	Drinking Water
Potato Creek	Fivemile Creek to Hoyle Branch	Drinking Water
Pound Creek	Headwaters to confluence with Cane Creek (including Lake Meriwether)	Drinking Water
Rush Creek	Headwaters to confluence with Lazer Creek (including Rush Creek Reservoir)	Drinking Water
Shoal Creek	Headwaters to Flint River (including Shoal Creek Reservoir)	Drinking Water
Still Branch	Headwaters to confluence with Flint River (including Still Branch Reservoir)	Drinking Water
White Oak Creek	Headwaters to Chandlers Creek	Drinking Water
Whitewater Creek	Tar Creek to Haddock Creek	Drinking Water

OCHLOCKONEE RIVER BASIN

CLASSIFICATION

Little River	Reed Bingham State Park Lake, Reed Bingham State Park Lake Beach	Recreation
--------------	--	------------

OCMULGEE RIVER BASIN

CLASSIFICATION

Alcovy River	Maple Creek to Cornish Creek (including John T. Briscoe Reservoir)	Drinking Water
Beaverdam Creek	Headwaters to confluence with Alcovy River	Drinking Water
Big Cotton Indian Creek	Coker Branch to Rocky Branch	Drinking Water
Big Haynes Creek	Georgia Highway 78 to confluence with Yellow River	Drinking Water
Big Sandy Creek	Chief McIntosh Lake, Indian Springs State Park Beaches	Recreation
Big Towaliga Creek	Headwaters to confluence with Edie Creek	Drinking Water
Brown Branch	Headwaters to Wolf Creek	Drinking Water
Cornish Creek	Headwaters to confluence with Alcovy River (including Lake Varner)	Drinking Water
Edie Creek	Headwaters to confluence with Big Towaliga Creek	Drinking Water
Indian Creek	Headwaters to confluence with Towaliga River	Drinking Water
Jackson Lake	From South River at Georgia Hwy. 36; from Yellow River at Georgia Hwy. 36; from Alcovy River at	Recreation

	Newton Factory Road Bridge to Lloyd Shoals Dam	
Little Cotton Indian Creek	Confluence of Reeves and Rum Creeks to confluence with Big Cotton Indian Creek	Drinking Water
Headwaters of Little Ocmulgee River	Little Ocmulgee Lake, Little Ocmulgee State Park Beach	Recreation
Little Towaliga River	Confluence of Edie and Big Towaliga Creeks to confluence with Towaliga River	Drinking Water
Long Branch	Headwaters to confluence with Towaliga River	Drinking Water
Ocmulgee River	Jackson Lake Dam to Wise Creek	Drinking Water
Ocmulgee River	Pratts Creek to Walnut Creek	Drinking Water
Pates Creek	Headwaters to confluence with Little Cotton Indian Creek (including Blalock Reservoir)	Drinking Water
Rocky Creek	Headwaters to Towaliga River	Drinking Water
Towaliga River	Thompson Creek to Georgia Hwy. 36	Drinking Water
Towaliga River	Georgia Hwy. 36 to High Falls Lake Dam	Recreation
Towaliga River	High Falls Lake, High Falls State Park Beaches	Recreation
Tobesofkee Creek	Reeves Creek to Rock Branch	Drinking Water
Tobesofkee Creek	Georgia Hwy. 74 to Lake Tobesofkee Dam	Recreation
Town Creek	Headwaters to Ocmulgee River	Drinking Water
Tributary to Dried Creek	Headwaters to confluence with Dried Indian Creek (including Covington Reservoir)	Drinking Water
Tussahaw Creek	Headwaters to Baker Branch	Drinking Water
Walnut Creek	Headwaters to Camp Creek (including Walnut Creek Reservoir)	Drinking Water
Yellow River	Georgia Hwy. 124 to Porterdale Water Intake	Drinking Water

OCONEE RIVER BASIN

CLASSIFICATION

Apalachee River	Shoal Creek to Freeman Creek	Drinking Water
Barber Creek	Headwaters to Parker Branch	Drinking Water
Bear Creek	Headwaters to confluence with Middle Oconee River (including Bear Creek Reservoir)	Drinking Water
Cedar Creek (Hall Co.)	Headwaters to confluence with North Oconee River	Drinking Water
Curry Creek	Headwaters to confluence with Little Curry Creek	Drinking Water

Fort Creek	Headwaters to confluence with Sikes Creek upstream of Lake Sinclair	Drinking Water
Hard Labor Creek	Headwaters to Lake Brantley Dam	Drinking Water
Hard Labor Creek	Lake Rutledge, Hard Labor Creek State Park Beaches	Recreation
Hard Labor Creek	Lake Rutledge Dam to Mile Branch	Drinking Water
Jacks Creek	Headwaters to Grubby Creek	Drinking Water
Lake Oconee	Lake Oconee to Lake Oconee Dam (Wallace Dam)	Recreation and Drinking Water
Lake Sinclair	Lake Oconee Dam downstream to Sinclair Dam	Recreation and Drinking Water
Little River	Big Indian Creek to Glady Creek	Drinking Water
Lowry Branch	Headwaters to confluence with Pearson Creek	Drinking Water
Marbury Creek	Fort Yargo Lake, Fort Yargo State Park Beaches	Recreation
Middle Oconee River	Beech Creek to McNutt Creek	Drinking Water
Mulberry River	Little Mulberry Creek to Barbers Creek	Drinking Water
North Oconee River	Cedar Creek to Gravelly Creek	Drinking Water
North Oconee River	Shankles Creek to Trail Creek	Drinking Water
Oconee River	Sinclair Dam to Fishing Creek	Drinking Water
Oconee River	Oochee Creek to Long Branch	Drinking Water
Parks Creek	Headwaters to confluence with North Oconee River	Drinking Water
Popes Branch	Headwaters to confluence with Pearson Creek	Drinking Water

OGEECHEE RIVER BASIN

CLASSIFICATION

Julienton River	Contentment Bluff Sandbar and Dallas Bluff Sandbar	Recreation
Little Ogeechee River	South end of White Bluff Road near Carmelite Monastery to Open Sea and littoral waters of Skidaway and Ossabaw Islands	Recreation
Ogeechee River	U.S. Hwy. 17 Bridge to Open Sea and littoral waters of Skidaway, Ossabaw, Sapelo, and St. Catherines Islands	Recreation
Rocky Comfort Creek	Headwaters to confluence with Whetstone Creek	Drinking Water
Skidaway River	Skidaway Narrows in Chatham County	Recreation

SATILLA RIVER BASIN

CLASSIFICATION

All littoral waters on the ocean side of Cumberland Island		Recreation
All littoral waters on the ocean and sound side of Jekyll Island		Recreation
South Brunswick River	Blythe Island Sandbar	Recreation

SAVANNAH RIVER BASIN

CLASSIFICATION

Abercorn Creek	Confluence with Little Abercorn Creek to Savannah River	Drinking Water
Beaverdam Creek	Confluence with Little Beaverdam Creek to Carters Creek	Drinking Water
Beaverdam Creek (Lake Boline)	Headwaters to confluence with Little Beaverdam Creek (including Lake Boline)	Drinking Water
Brier Creek	Walnut Branch to Fitz Creek	Drinking Water
Chattooga River	Georgia-North Carolina State Line to Tugaloo Reservoir	Wild and Scenic
Chattooga Reservoir	River/Tugaloo Tugaloo Reservoir to confluence with Tallulah River	Recreation
Cedar Creek	Headwaters to confluence with Little Toccoa Creek (including Toccoa Reservoir)	Drinking Water
Grove Creek	Headwaters to confluence with Hickory Level Creek	Drinking Water
Unnamed Tributary to Lick Creek	Lake Liberty, A.H. Stephens State Park Beach	Recreation
Little Beaverdam Creek	Headwaters to confluence with Beaverdam Creek	Drinking Water
Mountain Creek	Headwaters to Little Nails Creek	Drinking Water
North Fork Broad River	Confluence with Double Branch to confluence with Middle Fork Broad River	Drinking Water
Savannah River/Lake Russell and Clarks Hill Lake	GA Highway 368/SC Highway 184 to Clarks Hill Dam (Mile 238)	Recreation and Drinking Water
Savannah River	Clarks Hill Dam (Mile 238) to Horse Creek including Stevens Creek Reservoir and Augusta Canal	Drinking Water
Savannah River	US Hwy. 301 Bridge (Mile 129) to Seaboard Coastline RR Bridge (Mile 27.4)	Drinking Water
Savannah River	Seaboard Coastline RR Bridge (Mile 27.4) to Fort Pulaski (Mile 0)	Coastal Fishing
Savannah River	Fort Pulaski (Mile 0) to Open Sea and all littoral waters of Tybee Island	Recreation
Sherrills Creek	Headwaters to confluence with South Fork Little River (including Sherrills Reservoir)	Drinking Water

Sweetwater Creek	Headwaters to confluence with Brier Creek (including Usry Lake)	Drinking Water
Tallulah River	Headwaters, including Lakes Burton and Seed, to confluence with Flat Creek	Recreation
Tallulah River/ Lake Rabun	Confluence of Flat Creek, including Lake Rabun, to Rabun Dam	Recreation and Drinking Water
Tallulah River	Lake Rabun Dam to confluence with Chattooga River	Recreation
Town Creek (Tributary to Long Creek)	Headwaters to confluence with Brooks Creek	Drinking Water
Tributary to Crawford Creek	Headwaters to confluence with Crawford Creek (including Works Reservoir)	Drinking Water
Tugaloo River	Confluence of Tallulah and Chattooga Rivers to Yonah Lake Dam	Recreation and Drinking Water
Tugaloo River/Lake Hartwell	Confluence with Prather Creek (near GA SR 184) to Lake Hartwell Dam	Recreation and Drinking Water
West Fork Chattooga	Confluence of Overflow Creek and Clear Creek to confluence with Chattooga River (7.3 mi.)	Wild and Scenic

ST. MARYS RIVER BASIN

All littoral waters on the ocean side of Cumberland Island

CLASSIFICATION

Recreation

SUWANNEE RIVER BASIN

Big Creek

Lake Laura S. Walker, Laura Walker State Park Beach

CLASSIFICATION

Recreation

TALLAPOOSA RIVER BASIN

Astin Creek

Headwaters to Little Tallapoosa River including unnamed tributary to Cowans Lake

CLASSIFICATION

Drinking Water

Beach Creek

Headwaters to Bush Creek

Drinking Water

Bush Creek

Headwaters to Beach Creek

Drinking Water

Indian Creek

Confluence with Turkey Creek to Indian Branch

Drinking Water

Little Tallapoosa River

Headwaters of Lake Paradise to confluence with Astin Creek

Drinking Water

Little Tallapoosa River

Sharpe Creek to Buck Creek

Drinking Water

Tallapoosa River

Beach Creek to Mann Creek

Drinking Water

Turkey Creek

Jump In Creek to Indian Creek

Drinking Water

TENNESSEE RIVER BASIN

CLASSIFICATION

Black's Creek	Headwaters to confluence with Little Tennessee River	Drinking Water
Hiawasse River	Headwaters to Lake Chatuge	Recreation
Hiawasse River/ Lake Chatuge	Lake Chatuge to Georgia - North Carolina State Line	Recreation and Drinking Water
Lookout Creek	Confluence with Turner Branch to confluence with Sitton Gulch Creek	Drinking Water
Mud Creek	Headwaters to confluence with Little Tennessee River	Drinking Water
Nottely River	Headwaters to confluence with Fortenberry Creek	Recreation
Notley River/Lake Notley	Confluence with Fortenberry Creek to Lake Notley Dam	Recreation and Drinking Water
Notely River	Lake Notley Dam to Georgia - North Carolina State Line	Recreation
South Chickamauga Creek	Confluence of Tiger Creek with East Chickamauga Creek to confluence with Little Chickamauga Creek	Drinking Water
Toccoa River/Lake Blue Ridge	Headwaters to Lake Blue Ridge Dam	Recreation
Toccoa River	Lake Blue Ridge Dam to Georgia - Tennessee State Line	Recreation and Drinking Water
Tributary to Crawfish Spring Lake	Headwaters to confluence with Coke Oven Branch (including Crawfish Spring Lake) to West Chickamauga Creek	Drinking Water
Wolf Creek	Lake Trahlyta, Vogel State Park Beach	Recreation

(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. Dry Creek watershed upstream from Catoosa County Road 257 (East Chickamauga Creek Watershed).
2. Hurricane Creek watershed upstream from Peters Branch.
3. Little Chickamauga Creek watershed upstream from Catoosa County Road 387.
4. Tiger Creek watershed upstream from Georgia Hwy. 2.

CHATTOOGA COUNTY

Primary:

None.

Secondary:

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. Bluff Creek watershed upstream from Cherokee County Road 114.

2. Boston Creek watershed.

3. Murphy Creek watershed.

4. Pine Log Creek watershed.

5. Salacoa Creek watershed.

6. Soap Creek watershed upstream from Cherokee County Road 116.

7. Stamp Creek watershed.

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. Anderson Creek watershed.
3. Long Swamp Creek watershed.
4. Nimblewill Creek watershed.
5. Sweetwater 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.

Secondary:

1. Savannah River for the ten-mile reach downstream from Hartwell Dam.

FANNIN COUNTY

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 Raper 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.

Secondary:

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 893.
5. Little Cedar Creek watershed.
6. Mt. Hope Creek watershed.
7. Silver Creek watershed upstream from Georgia Highway 1E.

8. Spring Creek watershed (flows into State of Alabama).
9. Spring Creek water shed (flows into Etowah River).
10. Toms 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 watershed - including Jacks River watershed.
4. Ellijay River watershed upstream from the mouth of Kells Creek.
5. Harris Creek watershed.
6. Johnson Creek watershed.
7. Mountaintown Creek watershed upstream from U.S. Highway 76.
8. Tails Creek watershed upstream from Georgia Hwy. 282.

9. Toccoa River watershed - including 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 Gordon County Road 275.
5. Rocky Creek watershed upstream from Gordon County Road 210.
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 (Georgia Hwy. 197).
7. Toccoa Creek watershed.

HARALSON COUNTY

Primary:

None.

Secondary:

1. Beach Creek watershed upstream from Haralson County Road 34.
2. Flatwood Creek watershed.
3. Lassetter Creek watershed.

4. Mann Creek watershed upstream from Haralson County Road 162.
5. Mountain Creek watershed.
6. Tallapoosa River watershed upstream from Haralson County Road 222.
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 (Lumpkin County Road 190).
6. Clay Creek watershed.
7. Etowah River watershed upstream from the Georgia Hwy. 52 Bridge.
8. Hurricane Creek watershed upstream from Lumpkin County Road 202.
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 (Lumpkin County Road 190).
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 River watershed, including - 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).

Secondary:

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. Mill Creek (Hassler Mill Creek) watershed within the Holly Creek watershed.
5. North Prong Sumac Creek watershed.
6. Sugar Creek watershed upstream from Murray County Road 4.
7. Sumac Creek watershed upstream from Coffey Lake.
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 (Powder Springs Creek) watershed.
3. Pumpkinvine Creek watershed upstream from Paulding County Road 231.
4. Pyle Creek watershed.
5. Raccoon Creek watershed upstream from Road SR2299 (Paulding County Road 471).
6. Tallapoosa River watershed.
7. Simpson Creek watershed.
8. Thompson Creek watershed.
9. Ward Creek watershed.

PICKENS COUNTY

Primary:

1. Cartecay River watershed.
2. Talking Rock Creek watershed upstream from Route S1011 (GA Highway 136).

Secondary:

1. Amicalola Creek watershed.
2. Ball Creek watershed.
3. Bluff Creek watershed.
4. East Branch watershed (including Darnell Creek watershed).
5. Fisher Creek watershed (upstream from the confluence of Talona Creek and Fisher Creek).
6. Fourmile Creek watershed.
7. Hobson Creek watershed.
8. Little Scarecorn Creek watershed.

9. Long Branch watershed.
10. Long Swamp Creek watershed upstream from Pickens County Road 294.
11. Mud Creek watershed.
12. Pin Hook Creek watershed.
13. Polecat Creek watershed.
14. Rock Creek watershed.
15. Salacoa Creek watershed.
16. Scarecorn Creek watershed upstream from Georgia Hwy. 53.
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. Fish Creek watershed upstream of Plantation Pipeline.
3. Lassetter Creek watershed.
4. Little Cedar Creek watershed.
5. Pumpkinpile Creek watershed upstream from Road SR1032.
6. Silver Creek watershed.
7. Simpson Creek watershed upstream of Lake Dorene.
8. Spring Creek watershed.
9. Swinney Branch watershed.

10. Thomasson Creek watershed.
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 Lake 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.

Secondary:

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 (Union County Rd 237).
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. Nottely 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. Chattanooga Creek watershed upstream of Walker County Road 235.
3. Concord Creek watershed.
4. Dry Creek watershed (tributary to East Armuchee Creek).
5. Duck Creek watershed.
6. East Armuchee Creek watershed upstream from Georgia Hwy. 136.
7. East Fork Little River watershed (flows into Dade County).
8. East Fork Little River watershed (flows into Chattooga County; includes Gilreath Creek).
9. Gulf Creek watershed.
10. Johns Creek watershed.

11. Left Fork Coulter Branch watershed.
12. Little Chickamauga Creek watershed.
13. Middle Fork Little River watershed (includes Cannon Branch and Hale Branch).
14. Rock Creek watershed (including Sawmill Branch) upstream from Sawmill Branch.
15. Ruff Creek watershed.
16. Snake Creek watershed.
17. West Armuchee Creek watershed.
18. West Chickamauga Creek watershed upstream from Walker County Road 107.
19. West Fork Little River watershed.

WHITE COUNTY

Primary:

1. Cathey Creek watershed upstream from the Arrowhead Campground Lake at the mouth of Tom White Branch.
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. Dry Creek watershed.
3. Snake Creek watershed.
4. Spring Creek watershed.
5. Swamp Creek watershed upstream from Whitfield County Road 9.
6. Tiger Creek watershed

- (16) **Waters Generally Supporting Shellfish.** The waters listed below are either productive shellfish waters or have the potential to support shellfish. However, it may not be lawful to harvest shellfish from all of the waters listed below. Shellfish may only be harvested from waters approved for harvest by the Georgia DNR Coastal Resources Division. For a current list of approved waters for harvesting, contact the Coastal Resources Division.

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 ° 44.2' 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 from 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' and eastward.
6. Hudson Creek at Latitude 31 ° 27.2' and eastward.
7. Carnigan River at Latitude 31 ° 26.2' 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' to confluence with Folly River.

10. Folly River at Longitude 81 ° 21.2' 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 intracoastalwaterway.
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' 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 the chlorophyll a concentrations at the locations listed below more than once in a five-year period.
 1. Upstream from the Dam in the Forebay 22 µg/L
 2. LaGrange Water Intake 24 µg/L
 - (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) Total Phosphorous: Total lake loading shall not exceed 2.4 pounds per acre foot of lake volume per year.
 - (v) 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)(iii).
 2. New River to West Point Dam: E. coli 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 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 µg/L at mid-river at U.S. Highway 82 or 15 µg/L at mid-river in the dam forebay more than once in a five-year period.
 - (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) Total Phosphorous: Total lake loading shall not exceed 2.4 pounds per acre-foot of lake volume per year.
 - (v) Bacteria:
 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: E. coli 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)(g).
 - (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 mid-channel 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 more than once in a five-year period.
 - (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) Total Phosphorous: Total lake loading shall not exceed 5.5 pounds per acre-foot of lake volume per year.
 - (v) Bacteria: E. coli 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 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 of monthly mid-channel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below more than once in a five-year period :

1. Upstream from the Dam	10 µg/L
--------------------------	---------

- | | |
|--|---------|
| 2. Allatoona Creek upstream from I-75 | 12 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 | 14 µg/L |

- (ii) pH: Within the range of 6.0-9.5 standard units
- (iii) Total Nitrogen: Not to exceed a growing season average of 4 mg/L as nitrogen in the photic zone.
- (iv) Total Phosphorous: Total lake loading shall not exceed 1.3 pounds per acre-foot of lake volume per year.
- (v) Bacteria:
 - 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: E. coli 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)	12,500 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 mid-channel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below more than once in a five-year period:

1. Upstream from the Buford Dam forebay	5 µg/L
2. Upstream from the Flowery Branch confluence	6 µg/L
3. At Browns Bridge Road (State Road 369)	7 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) Total Phosphorous: Total lake loading shall not exceed 0.25 pounds per acre-foot of lake volume per year.
 - (v) Bacteria: E. coli 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 mid-channel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below more than once in a five-year period:

1. Carters Lake upstream from Woodring Branch	10 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) Total Phosphorous: Total lake loading shall not exceed 172,500 pounds or 0.46 pounds per acre-foot of lake volume per year.
- (v) Bacteria: E. coli 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 16,000 pounds

(18) **Effective Date.** This rule shall become effective twenty days after filing with the Secretary of State's office.

Cite as Ga. Comp. R. & Regs. R. 391-3-6-.03

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.

Amended: F. Jan. 29, 2009; eff. Feb. 18, 2009.

Amended: F. May 16, 2011; eff. June 5, 2011.

Amended: F. Oct. 2, 2013; eff. Oct. 22, 2013.

Amended: New title "Water Use Classifications and Water Quality Standards." F. Oct. 2, 2015; eff. Oct. 22, 2015.

Rule 391-3-6-.06. Waste Treatment and Permit Requirements. Amended

- (1) **Purpose.** The purpose of this Paragraph 391-3-6-.06 is to provide for the degree of waste treatment required and the uniform procedures and practices to be followed relating to the application for issuance, modification, revocation and reissuance, and termination of permits for the discharge of any pollutant into the waters of the State. Requirements applicable to general NPDES permits are provided in subparagraphs 391-3-6-.15 and 391-3-6-.16.
- (2) **Definitions.** All terms used in this Paragraph shall be interpreted in accordance with the definitions as set forth in the Act unless otherwise defined in this Paragraph or in any other Paragraph of these Rules:
 - (a) "Annual average stream flow" means that flow measured daily at the nearest listed U.S. Geologic Survey stream gauge, averaged for the entire period of record, and adjusted by comparison to the size of the drainage area in which the discharge is located.
 - (b) "Aquaculture project" means any point source which meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.25;
 - (c) "Concentrated animal feeding operation" means any point source which meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.23;
 - (d) "Concentrated aquatic animal production facility" means any point source which meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.24;
 - (e) "Construction" means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises;
 - (f) "Dilution factor" means a numerical representation of the dilution of the permitted effluent from the wastewater treatment facility in the receiving stream. It shall be used to calculate instream concentrations of priority pollutants when the effluent concentration is known and to calculate effluent limitations from the instream criteria concentration listed in 391-3-6-.03(5)(e).
 1. For constituents and their criteria listed in 391-3-6-.03(5)(e)(i) and (iii) and for constituents and their chronic criteria in 391-3-6-.03(5)(e)(ii), the dilution factor equals:
$$\frac{7\text{-day, 10-year minimum stream flow (7Q}_{10}) + \text{discharger design flow}}{\text{discharger design flow}}$$

For constituents and their acute criteria listed in 391-3-6-.03(5)(e)(ii), the dilution factor for the calculation of effluent limitations equals:
$$\frac{1\text{-day, 10-year minimum stream flow (1Q}_{10}) + \text{discharger design flow}}{\text{discharger design flow}}$$

For constituents listed in 391-3-6-.03(5)(e)(iv), the dilution factor equals:

Annual or long-term average stream flow + Discharger design flow /
discharger design flow

2. The dilution factor equations assume a relatively rapid and complex mix. In situations where this does not occur, the Permittee or EPD may perform field studies to document and describe the mixing zone. The dilution factor in such situations, for the purpose of calculating effluent limitations for chemical constituents, will be determined based on the studies. If a mixing zone is granted, all criteria and requirements of subsection 391-3-6-.03(10) must also be met.
 3. In situations where the dilution factor equations do not appropriately describe the dilution capacity of receiving waters, such as for discharges to impounded waters or to tidal estuaries, the dilution factor will be determined through field studies or appropriate analytical procedures.
- (g) "Effluent Limitation" means any restriction or prohibition established under the Act on quantities, rates, or concentrations, or a combination thereof, of chemical, physical, biological, or other constituents which are discharged from point sources into the waters of the State, including, but not limited to, schedules of compliance and whole effluent biological monitoring requirements;
- (h) "EPD" means the Environmental Protection Division of the Georgia Department of Natural Resources;
- (i) "Indirect discharger" means a non-domestic discharger introducing pollutants to a publicly owned treatment works;
- (j) "Major discharger" as defined in EPA annual operating guidance for the EPA Regional Offices and the States and specifically listed in the annual State program plan;
- (k) "New discharger" means any point source that meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.29;
- (l) "New Source" means any point source that meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.29;
- (m) "NPDES Permit Application" means the application filed by any person with the Director for an NPDES Permit;
- (n) "NPDES Permit" means the permit issued by the Division to regulate the discharge of pollutants from any point source into the waters of the State;
- (o) "Segment" means a portion of a water quality planning area, the surface waters of which have common hydrologic characteristics (or flow regulation patterns); common natural physical, chemical and biological characteristics and processes; and common reactions to external stresses, such as the discharge of pollutants. Segments will be classified as either a water quality segment or an effluent limitation segment as follows:

1. Water quality segment. Any segment where it is known that water quality does not meet applicable water quality standards and/ or is not expected to meet applicable water quality standards even after the application of the effluent limitations required by sections 301(b)(1)(B) and 301(b)(2)(A) of the Act;
 2. Effluent limitation segment. Any segment where it is known that water quality is meeting and will continue to meet applicable water quality standards or where there is adequate demonstration that water quality will meet applicable water quality standards after the application of the effluent limitations required by sections 301(b)(1)(B) and 301(b)(2)(A) of the Act.
- (p) "Separate storm sewer" means any point source which meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.26.
- (q) "Silvicultural point source" means any point source which meets the criteria set forth in the Federal Regulations, 40 C.F.R. 122.27;

(3) Permit Requirement.

- (a) Any person discharging or proposing to discharge into the waters of the State any pollutant from a point source including those defined in Paragraph 391-3-6-.06(2) above, under any of the circumstances described in O.C.G.A. Section 12-5-30(a), shall obtain a permit from the EPD to make such discharge.
- (b) Any person discharging or proposing to discharge any pollutant from a non-point source into the waters of the State, under the circumstances described in O.C.G.A. Section 12-5-30(b), shall obtain written approval from the EPD and shall be required to use best management practices to minimize to the extent feasible as determined by the EPD the introduction of the pollutant into the waters of the State. The best management practices shall be included in a permit, if the Director has issued one to the same person for a point source discharge.
- (c) Any person owning or operating a treatment works, from which a discharge into the waters of the State could possibly occur, excluding discharges which could result from Acts of God, shall apply to the EPD for a permit.

(4) Degree of Waste Treatment Required.

- (a) All pollutants shall receive such treatment or corrective action so as to ensure compliance with the terms and conditions of the issued permit and with the following, whenever applicable:
 1. Effluent limitations established by EPA pursuant to Sections 301, 302, 303 and 316 of the Federal Act;
 2. Standards of performance for new sources established by the EPA pursuant to Section 306 of the Federal Act;
 3. Effluent limitations and prohibitions and pretreatment standards established by the EPA pursuant to Section 307 of the Federal Act;

4. Criteria for the issuance of permits to aquaculture projects, as defined in this Paragraph, established by EPA pursuant to Section 318 of the Federal Act;
 5. Criteria and standards for Best Management Practices established by EPA pursuant to Section 304(e) of the Federal Act;
 6. Criteria and standards for imposing conditions for the disposal of sewage sludge established by EPA pursuant to Section 405 of the Federal Act;
 7. Ensure consistency with the requirements of a Water Quality Management plan approved by EPA pursuant to Section 208(b) of the Federal Act;
 8. Criteria for ocean discharges established by EPA pursuant to Section 403(c) of the Federal Act;
 9. Incorporate alternative effluent limitations or standards where warranted by "fundamentally different factors" established by EPA; in accordance with Federal Regulations, 40 C.F.R. 124.62(e);
 10. Notwithstanding the above, more stringent effluent limitations may be required as deemed necessary by the EPD (a) to meet any other existing Federal laws or regulations, or (b) to ensure compliance with any applicable State water quality standards, effluent limitations, treatment standards, or schedules of compliance;
 11. With regard to any non-point source required to obtain a permit, such best management practices as are required to ensure compliance with applicable State water quality standards.
- (b) Calculations and specification of effluent limits and standards shall be made in accordance with the provisions of Federal Regulations, 40 C.F.R. 122.44 and 122.45.
- (c) The foregoing requirements shall be applied in considering all applications made pursuant to O.C.G.A. Section 12-5-30, and no such application will be approved unless the waste treatment facilities contemplated thereby will achieve such limitations and standards upon completion thereof or within such reasonable time thereafter as the EPD may provide, consistent with subparagraph 391-3-6-.06(10).
- (d) Until such time as such criteria, standards, limitations, and prohibitions are promulgated pursuant to Sections 301, 302, 303, 304(e), 306, 307 and 405 of the Federal Act, the EPD shall apply such standards, limitations and prohibitions necessary to achieve the purposes of said sections of the Federal Act. With respect to individual point sources, such limitations, standards, or prohibitions shall be based upon an assessment of technology and processes, to wit:
1. To existing point sources, other than publicly owned treatment works, effluent limitations based on application of the best practicable control technology currently available;

2. To publicly owned treatment works, effluent limitations based upon the application of secondary treatment or treatment equivalent to secondary treatment in accordance with Federal Regulations, 40 C.F.R. 133.102 and .105;
3. To any point source, other than publicly owned treatment works, whose construction commences after the initial effective date of this Paragraph, and for which there are not new source performance standards, effluent limitations which reflect the greatest degree of effluent reduction which the EPD determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants, consistent with 40 C.F.R. 125.3(c)(2).
4. To any point source, as appropriate, effluent limitations or prohibitions designed to prohibit the discharge of toxic pollutants in toxic amounts or to require pretreatment of pollutants which interfere with, pass through, or otherwise are incompatible with the operation of publicly owned treatment works; and
5. To any point source, as appropriate, more stringent effluent limitations as are required to ensure compliance with applicable State water quality standards, including those to prohibit the discharge of toxic pollutants in toxic amounts. Where necessary, NPDES Permits issued or reissued after the adoption of this paragraph shall include numeric criteria based upon the following procedures to ensure that toxic substances and other priority pollutants are not discharged to surface waters in harmful amounts:
 - (i) The EPD will review available data for reported concentrations of any of the following chemical constituents detected at levels based upon analytical methods described in Federal Regulations 40 C.F.R. 136, or that have EPA concurrence, which establishes guidelines on test procedures for the analysis of pollutants.

CHEMICAL CONSTITUENT

1. Methoxychlor
2. 2,4-Dichlorophenoxyacetic acid (2, 4-D)
3. 2,4,5-Trichlorophenoxy propionic acid (TP Silvex)
4. Antimony
5. Arsenic
6. Beryllium
7. Cadmium
8. Chromium (III)

9. Chromium (VI)
10. Copper
11. Lead
12. Mercury
13. Nickel
14. Selenium
15. Silver
16. Thallium
17. Zinc
18. Cyanide
19. Acrolein
20. Acrylonitrile
21. Benzene
22. Bromoform (Tribromomethane)
23. Carbon Tetrachloride
24. Chlorobenzene
25. Chlorodibromomethane
26. Chloroethane
27. 2-Chloroethylvinyl Ether
28. Chloroform (Trichloromethane)
29. Dichlorobromomethane
30. 1,1-Dichloroethane
31. 1,2-Dichloroethane
32. 1,1-Dichloroethylene
33. 1,2-Dichloropropane

34. 1,3-Dichloropropylene
35. Ethylbenzene
36. Methyl Bromide (Bromomethane)
37. Methylene Chloride
38. Methyl Chloride (Chloromethane)
39. 1,1,2,2-Tetrachloroethane
40. Tetrachloroethylene
41. Toluene
42. 1,2-Trans- Dichloroethylene
43. 1,1,1-Trichloroethane
44. 1,1,2-Trichloroethane
45. Trichloroethylene
46. Vinyl Chloride
47. 2-Chlorophenol
48. 2,4-Dichlorophenol
49. 2,4-Dimethylphenol
50. 2-Methyl-4,6- Dinitrophenol
51. 2,4-Dinitrophenol
52. 2-Nitrophenol
53. 4-Nitrophenol
54. 3-Methyl-4-Chlorophenol
55. Pentachlorophenol
56. Phenol
57. 2,4,6-Trichlorophenol
58. Acenaphthene

59. Acenaphthylene
60. Anthracene
61. Benzidine
62. Benzo(a)Anthracene
63. Benzo(a)Pyrene
64. 3,4-Benzofluoranthene
65. Benzo(ghi)Perylene
66. Benzo(k)Fluoranthene
67. Bis(2-Chloroethoxy)Methane
68. Bis(2-Chloroethyl)Ether
69. Bis(2-Chloroisopropyl)Ether
70. Bis(2-Ethylhexyl) Phthalate
71. 4-Bromophenyl Phenyl Ether
72. Butylbenzyl Phthalate
73. 2-Chloronaphthalene
74. 4-Chlorophenyl Phenyl Ether
75. Chrysene
76. Dibenzo(a,h)Anthracene
77. 1,2-Dichlorobenzene
78. 1,3-Dichlorobenzene
79. 1,4-Dichlorobenzene
80. 3,3'-Dichlorobenzidine
81. Diethyl Phthalate
82. Dimethyl Phthalate
83. Di-n-Butyl Phthalate

84. 2,4-Dinitrotoluene
85. 2,6-Dinitrotoluene
86. Di-n-Octyl Phthalate
87. 1,2-Diphenylhydrazine
88. Fluoranthene
89. Fluorene
90. Hexachlorobenzene
91. Hexachlorobutadiene
92. Hexachloro- cyclopentadiene
93. Hexachloroethane
94. Indeno(1,2,3-cd) Pyrene
95. Isophorone
96. Naphthalene
97. Nitrobenzene
98. N-Nitrosodimethylamine
99. N-Nitrosodi-n- Propylamine
100. N-Nitrosodiphenylamine
101. Phenanthrene
102. Pyrene
103. 1,2,4-Trichlorobenzene
104. Aldrin
105. a-BHC-Alpha
106. b-BHC-Beta
107. Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]
108. d-BHC-Delta

109. Chlordane
110. 4,4'-DDT
111. 4,4'-DDE
112. 4,4'-DDD
113. Dieldrin
114. a-Endosulfan
115. b-Endosulfan
116. Endosulfan Sulfate
117. Endrin
118. Endrin Aldehyde
119. Heptachlor
120. Heptachlor Epoxide
121. PCBs
122. Toxaphene

- (ii) For the chemical constituents identified after completion of (i) above, and/or if other site specific information available to the EPD indicates the presence of one or more of the above chemical constituents at levels of concern to EPD, the EPD will control the chemical constituent with a monitoring provision or with effluent limitations in the NPDES permit.
 - (a) If there are less than 10 data points available at the time of evaluation, and if the instream concentration, which is measured or calculated by dividing the effluent concentration by appropriate dilution factor from 391-3-6-.06(2)(f), is greater than or equal to fifty percent of the criteria concentration(s), then the permittee will be required to monitor that constituent for at least ten months. If there is more than one data point at the time of evaluation, then the data will be averaged together in calculating the instream concentration as described above. An exception to this is if the stream concentration is to be compared against an acute criterion. If this is the case, then instead of using the average of the data, the highest data point in the set will be used to calculate the instream concentration. This number will then be compared against 50% of the acute criterion.

- (b) The EPD will review the monitoring results after the permittee has monitored the chemical constituents for at least ten months.
- (1) In the case of chemical constituents with acute criteria, if the instream concentration (calculated using the highest concentration of at least ten monthly samples and the formula(s) in 391-3-6-.06(2)(f) is greater than the acute criterion then an effluent limit(s) for that constituent will be required at permit issuance. If the instream concentration is less than or equal to the acute criterion, then the EPD may terminate or lessen the monitoring requirement for that constituent. In the case of all other chemical constituents with numeric criteria, if the average of at least ten monthly samples indicates that a chemical constituent's instream concentration is less than fifty percent of the instream criteria, based on the formula(s) in 391-3-6-.06(2)(f), then the EPD may terminate or lessen the monitoring requirement for that constituent. If the average is fifty percent or more of the instream criteria, an effluent limit(s) for that constituent will be required at permit issuance.
 - (2) If it is determined that an effluent limit(s) is required as described above, then the permit shall be reissued or modified to include an effluent limit(s) for the chemical constituent calculated as follows:

Effluent limit = criteria concentration X dilution factor X translation factor (if necessary).

The translation factor will be used to convert dissolved criteria concentrations into total recoverable permit limits using methods discussed in 391-3-6-.03(5)(e)(ii). Where a constituent has both an acute and chronic aquatic life criteria, the acute criteria will be used to calculate a daily maximum effluent limitation while the chronic criteria will be used to calculate a monthly average effluent limitation.

- (c) If the permit is issued or modified as in (ii)(b)(2) above for a chemical constituent listed in 391-3-6-.03(5)(e), the limit shall become effective upon issuance or modification of the permit.
- (d) At the request of the permittee, a schedule to allow for development of a site-specific effluent limit may be established by the EPD. This schedule would be contained in

the permit or in an accompanying Consent Order and include the following:

- (1) A requirement for monthly monitoring for all chemical constituents that are limited.
 - (2) A requirement that the permittee perform site-specific studies, consisting of whole effluent biomonitoring, water-effect ratio tests, stream studies, or other appropriate studies or calculations. The methodology for these tests will be determined by the EPD on a case-by-case basis. Water-effect ratio studies are to be conducted using the EPA guidance document "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals, EPA-823-B-94-001" or "Stream Lined Water-Effect Ratio Procedure for Discharges of Copper, EPA-822-R-01-005" or the most recent EPA guidance document.
 - (3) A requirement that all data obtained in (2) and (3) be submitted to the EPD for review.
 - (4) No more than two years following initiation of monitoring under (ii)(a), the EPD will use the data to calculate site-specific limitations for each chemical constituent, and will initiate the process to incorporate the limitation(s) into the permit along with requirements for a minimum of annual whole effluent biomonitoring. At any time during the two year period the EPD may, upon its initiative or that of the permittee, review the data that have been submitted and may determine that limits and monitoring requirements for one or more chemical constituents may be terminated. All modifications of limits and monitoring requirements will comply with anti-backsliding requirements contained in Section 402(o) of the Clean Water Act. Conversely, should the EPD determine that adequate data are available before the two year interim monitoring period, it may develop site-specific limitations for the constituent(s) without additional monitoring.
- (e) Any permit modifications or revocation/reissuances pursuant to (ii)(b)(2) or (ii)(d) will be performed in accordance with procedures described in 391-3-6-.06(7), including public participation requirements.
- (f) For any metals monitored during any portion of the limits determination process, measurement will be by the most

appropriate analytical technique approved by the U.S. EPA which provides a measurement of the portion of the metal present which may cause toxicity to aquatic life in the receiving stream.

- (iii) For other 307(a) chemical constituents, including priority pollutants not identified in 391-3-6-.03(5)(e)(i) -(vi) whole effluent biomonitoring will be used to develop either a site-specific criteria concentration or a whole effluent toxicity limit, with such limits to be incorporated into permits. This paragraph applies to the following chemical constituents:
- (a) Chloroethane
 - (b) 1,1-Dichloroethane
 - (c) 1,1,1-Trichloroethane
 - (d) 2-Nitrophenol
 - (e) 4-Nitrophenol
 - (f) Bis(2-Chloroethoxy) Methane
 - (g) 4-Bromophenyl Phenyl Ether
 - (h) 4-Chlorophenyl Phenyl Ether
 - (i) 2,6-Dinitrotoluene
 - (j) Di-n-Octyl Phthalate
 - (k) Naphthalene
 - (l) d-BHC-Delta
 - (m) Silver
 - (n) Beryllium
 - (o) 2-Chloro ethyl vinyl ether
 - (p) Methyl chloride (chloromethane)
 - (q) 3-Methyl-4-Chlorophenol
 - (r) Acenaphthylene
 - (s) Benzo (ghi) perylene

- (t) Phenanthrene
- (iv) The criteria concentration may be more stringent under either one of the following situations:
 - (a) If the chemical constituent exists in the upstream reaches of the receiving stream at any level greater than zero due to the presence of other direct dischargers. For this situation, the criteria concentration for computation of the effluent limit will be the net value after subtracting out this initial concentration. Unless actual water quality studies and monitoring or calculations indicate otherwise, it will be assumed that the upstream levels of each constituent are zero; or
 - (b) If the EPD determines that more stringent limitations should be imposed in order to reserve some assimilative capacity for future discharges.
- (v) The effluent limit determined in (ii)(b)(2) above may be adjusted as follows, to determine the actual effluent limit to be used in the permit:
 - (a) If the limit is more stringent than the analytical laboratory detection limit using analytical methods described in Federal Regulations 40 C.F.R. 136 or methods that have EPA concurrence, then the limit will include an accompanying statement in the permit that a reading of not detected using the analytical methods specified in the permit will be considered as being in compliance with the limit;
 - (b) If water quality studies and monitoring indicate that the chemical constituent is present in the water supply or in the upstream reaches of the receiving stream at a concentration equal to or exceeding the daily limit for the specific chemical constituent, and the presence of such cannot be attributed to direct point source dischargers, or nonpoint sources that can be reasonably controlled with best management practices, the limit will be set equal to the natural ambient concentration of the chemical constituent;
 - (c) For industrial point source dischargers, if the specific chemical constituent is regulated by a technology-based effluent guideline limit, the guideline limit will be compared to the calculated limit. The limit will be the more stringent of the two values;
 - (d) For complex effluents, where several chemical constituents exist, the EPD will assign a limit for each specific chemical constituent and may require a whole effluent biomonitoring

limit where there is a reasonable potential that the narrative criteria for whole effluent toxicity will be exceeded. Such whole effluent biomonitoring limitation will consist of a series of bioassays of the wastewater treatment plant effluent, and, if appropriate, toxicity source identification evaluations, and implementation steps to reduce the chronic toxicity. This approach shall not be applied to those chemical constituents considered potential or known carcinogens or to the chemical constituents identified in 391-3-6-.03(5)(d)(iii).

- (vi) NPDES permits issued or reissued after the adoption of this paragraph shall include biological monitoring provisions and, where determined by the State to be necessary, a water quality-based whole effluent provision utilizing numerical pass/fail criteria to manage the effluent for the additive effects of all Section 307(a)(1) Federal Clean Water Act toxic pollutants and other unknown toxic substances or priority pollutants. The water quality-based whole effluent approach will help to ensure that the wastewater treatment plant effluent does not contain unknown sources of acute and chronic toxicity that may interfere with the designated water quality use classifications of the receiving stream. The whole effluent acute biological toxicity monitoring provision ensures protection from acute toxicity within any designated mixing zone and helps to define alternate criteria to allow for the safe passage of aquatic organisms through streams with 7-day, 10-year minimum flows approaching zero. The numerical pass/fail criteria is also a screening technique for use by the EPD to determine priority toxicity reduction needs.
- (vii) Permits issued or reissued after the adoption of this paragraph may include site specific temporary exceptions to the applicable water quality standards under Chapter 391-3-6-.03(5)(e) when the requirements of this paragraph are met and the temporary exception is specifically authorized herein. Where a discharger cannot meet applicable limits for whole effluent toxicity because of a water quality based whole effluent toxicity criteria, site-specific temporary exceptions may be allowed on effluent dominated receiving streams under 7-day, 10-year minimum stream flow (7Q10) conditions provided that it has been demonstrated that the permitted discharge will comply with all chemical specific and other applicable water quality criteria, that the receiving stream will support a balanced indigenous population of aquatic life, and that controls more stringent than those required by Section 301(b) and 306 of the Federal Act for achieving whole effluent toxicity criteria would result in substantial and widespread adverse economic and social impacts to the affected communities. These site-specific exceptions shall be applicable only to the wastewater discharge as permitted at the time the exception is authorized with no changes in process or wastewater characteristics that would adversely affect water quality in the receiving stream or adversely affect the ability of potential new pollution abatement technologies to attain

compliance with the whole effluent toxicity criteria. These site-specific exceptions shall be reviewed consistent with 40 CFR 131.20 at least once in every 3- year period. If it is determined that feasible new pollution abatement technologies or alternatives have become available to allow compliance with whole effluent toxicity criteria, these site-specific exceptions may be revoked and the NPDES permits modified to require implementation of such pollution abatement technologies or alternatives as soon as reasonably practicable. Along with this permit modification will be a requirement for the permittee to comply with the water quality based whole effluent toxicity criteria after installation of these technologies.

(e) To all new dischargers or new sources the following shall apply:

1. Except as provided in subparagraph (e)2. any new discharger on which construction commenced after October 18, 1972, or any new source, which meets the applicable promulgated new source performance standards before the commencement of discharge, shall not be subject to any more stringent new source performance standards, or to any more stringent technology-based standards under section 301(b)(2) of the Federal Act for the shortest of the following periods:
 - (i) Ten years from the date that construction is completed;
 - (ii) Ten years from the date the source begins to discharge process or other nonconstruction related wastewater; or
 - (iii) The period of depreciation or amortization of the facility for the purposes of Section 167 or 169 (or both) of the Internal Revenue Code of 1986.

Comment: The provisions of this subparagraph do not apply to existing sources which modify their pollution control facilities or construct new pollution control facilities and achieve performance standards, but which are neither new sources nor new dischargers or otherwise do not meet the requirements of this subparagraph.

2. The protection of more stringent standards of performance afforded by subparagraph (e)1. of this section does not apply to:
 - (i) Additional or more stringent permit conditions which are not technology based, e.g., conditions based on water quality standards, or effluent standards or prohibitions under Section 307(a) of the Federal Act; and
 - (ii) Additional permit conditions controlling pollutants listed as toxic under Section 307(a) of the Federal Act or as hazardous substances under Section 311 of the Federal Act and which are not controlled by new source performance standards. This includes permit conditions controlling pollutants other than those identified as toxic or

hazardous where control of those other pollutants has been specifically identified as the method to control the toxic or hazardous pollutant.

3. Where an NPDES permit issued to a source enjoying a "protection period" under subparagraph (e)1. will expire on or before the expiration of the protection period, such permit shall require the owner or operator of the source to be in compliance with the requirements of Section 301 of the Federal Act and any other applicable requirements of the Federal Act immediately upon the expiration of the protection period. No additional period for achieving compliance with these requirements shall be allowed.
4. The owner or operator of a new source, a new discharger, a source recommencing discharge after terminating operations, or a source which has been an indirect discharger which commences discharging into navigable waters shall install and have in operating condition, and shall "startup" all pollution control equipment required to meet the terms and conditions of its permits before beginning to discharge. Within the shortest feasible time (not to exceed 90 days), the owner or operator must meet all permit terms and conditions.
5. After the effective date of new source performance standards, in accordance with Section 306(e) of the Federal Act, it shall be unlawful for any owner or operator of any new source to operate such source in violation of those standards, applicable to such source.

(5) Application for Permit.

- (a) Applications for permits under Section 10 of the Act shall be on forms as may be prescribed and furnished from time to time by the EPD. Applications shall be accompanied by all pertinent information as the EPD may require in order to establish effluent limitations in accordance with subparagraph 391-3-6-.06(4), including, but not limited to, complete engineering reports, schedule of progress, plans, specifications, maps, measurements, quantitative and qualitative determinations, records, and all related materials. In addition, applications will comply with the information requirements specified in the Federal Regulations, 40 C.F.R. 122.21(g)(7) and (j)(4).
- (b) Engineering reports, plans, specifications, and other material submitted to the EPD shall be prepared by or under the direct supervision or review of, and bear the seal of, a Professional Engineer competent in the field of sewage and industrial waste treatment. At no time shall this requirement be in conflict with O.C.G.A. Section 43-15 governing the practices of professional engineering and surveying.
- (c) Material submitted shall be complete and accurate.
- (d) Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:
 1. For a corporation, by a responsible corporate officer. For this subparagraph a responsible corporate officer means:

- (i) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or
 - (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
 3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.
- (e) All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (d) above or a duly authorized representative of such person, if:
1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;
 2. The authorization is made in writing by the person designated under (d) above; and
 3. The written authorization is submitted to the Director.
- (f) Any changes in written authorization submitted to the permitting authority under (e) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (e)1. and 2. above.
- (g) Any person signing any document under (d) or (e) above shall make the following certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- (h) All municipal discharges with permitted flows equal to or greater than one million gallons per day, or with an approved pretreatment program, or that are required to develop a pretreatment program, must submit with the application results of valid whole effluent toxicity testing.

1. This testing must be conducted using EPA's methods or other established protocols which are scientifically defensible and sufficiently sensitive to detect aquatic toxicity. Such testing must have been conducted since the last NPDES permit reissuance or major modification.
2. In addition to the dischargers listed above, the Director may require other municipal dischargers to submit the results of toxicity tests with their permit applications, based on considerations which the Director determines could cause or contribute to adverse water quality impacts.

Comment: The permit application will be revised to incorporate the statement in 391-3-6-.06(5)(g) above. Where a permit program document does not contain the statement, the certification must accompany the appropriate document.

(6) Receipt and Use of Application and Data.

- (a) Applications for permits will be reviewed together with such other information as may be necessary to ascertain the effect of the discharge of any such pollutant upon the waters into which such pollutant will be discharged.
- (b) Copies of the complete NPDES Permit Application received by the EPD shall be transmitted to the Regional Administrator for any comment in such manner as the Director and the Regional Administrator shall agree.
- (c) The EPD shall receive any relevant data collected by the Regional Administrator prior to the EPD's participation in the NPDES in such manner as the Director and the Regional Administrator shall agree.

(7) Notice and Public Participation.

- (a) Tentative Determination and Draft Permits:
 1. When the EPD is satisfied that the application is complete, a tentative determination will be made to issue or deny the permit. If the tentative determination is to issue the permit, a draft permit will be prepared in accordance with Federal Regulations, 40 C.F.R. 124.6, and applicable State laws prior to the issuance of a public notice.
- (b) Public Notice:
 1. Public notice of every complete permit application will be prepared and circulated in a manner designated to inform interested and potentially interested persons of the proposed discharge and of the proposed determination to issue or deny a permit for the proposed discharge. Procedures for circulation of the public notice shall include the following:
 - (i) Within the geographical area of the proposed discharge the public notice shall be circulated by at least one of the following: posting in the post office or other public buildings near the premises of the applicant in which the discharge is located; posting at the entrance of the applicant's premises or nearby; or publication in one (1) or more

newspapers of general circulation in the area affected by the discharge;

- (ii) A copy of the public notice shall be mailed to the permit applicant and a copy shall be available at the EPD office in Atlanta;
- (iii) Mailing of the public notice to any person or group upon written request including persons solicited from area lists from past permit proceedings. The EPD shall maintain a mailing list for distribution of public notices and fact sheet. Any person or group may request that their names be added to the mailing list. The request should be in writing to the EPD office in Atlanta and shall be renewed in December of each year. Failure to renew the request shall result in the removal of such name from the mailing list;
- (iv) The EPD shall provide a period of not less than thirty (30) days following the date of the public notice in which interested persons may submit their written views on the tentative determination with respect to the NPDES Permit Application. All written comment submitted during the thirty (30) day comment period will be retained by the EPD and considered in the final determination with respect to the permit application and shall be responded to in accordance with Federal Regulations, 40 C.F.R. 124.17. The comment period may be extended at the discretion of the Director;
- (v) The contents of the public notice will be in accordance with Federal Regulations, 40 C.F.B. 124.10(d);
- (vi) The EPD will prepare and distribute a fact sheet in accordance with Federal Regulations, 40 C.F.R. 124.8 and 124.56 and applicable State laws. A copy of the fact sheet will be available for public inspection at the EPD office in Atlanta. Any person may request in writing a copy of the fact sheet and it will be provided. The EPD shall add the name of any person or group upon request to the mailing list to receive copies of fact sheet;
- (vii) The EPD will prepare and distribute a statement of basis in accordance with Federal Regulations, 40 C.F.R. 124.7;
- (viii) The Director will mail a copy of the public notice to the U.S. Army Corps of Engineers, Federal and State agencies with jurisdiction over fish, shellfish and wildlife resources and to other appropriate governmental authorities and will provide such agencies an opportunity to submit their written views and recommendations in accordance with Federal Regulations, 40 C.F.R. 124.10 and applicable State laws. The comments of the District Engineer of the Corps of Engineers, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, or any State or Federal Agency with jurisdiction over fish, wildlife, or public health shall be considered in accordance with Federal Regulations. 40 C.F.R. 122.59;

- (ix) Copies of the proposed permits shall be transmitted to the Regional Administrator for review and comments in such manner as the Director and Regional Administrator shall agree;
- (x) The EPD shall transmit to the Regional Administrator a copy of every issued NPDES Permit, immediately following issuance, along with any and all terms, conditions, requirements or documents which are part of such permit or which affect the authorization by the permit of the discharge of pollutants.

(c) Public Hearings:

1. The Director shall provide an opportunity for an applicant, any affected state or interstate agency, the Regional Administrator or any other interested agency, person or group of persons to request a public hearing with respect to an NPDES Permit Application. Any such request for a public hearing shall be filed within the 30-day comment period prescribed in subparagraph 391-3-6.-06(7)(b)(v) and shall indicate the interest of the party filing such a request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public interest in holding such a hearing;
2. Any public hearing held pursuant to this subparagraph shall be held in the geographical area of the proposed discharge or other appropriate location at the discretion of the Director;
3. The Director may hold one public hearing on related groups of permit applications;
4. Public notice of any hearing held pursuant to this subparagraph shall be provided at least thirty (30) days in advance of the hearing date and shall be circulated in accordance with Federal Regulations, 40 C.F.R. 124.10(c) where applicable to State-issued permits.

(d) Public Access to Information:

1. A copy of the NPDES Permit Application, public notice, fact sheet, statement of basis, and draft permit and other NPDES forms related thereto, including written public comments and comments of all governmental agencies thereon and other reports, files and information not involving methods or processes entitled to protection as trade secrets, shall be available for public inspection and copying during normal business hours at the EPD office in Atlanta. Effluent data shall not be considered as information entitled to protection. Public access to such information shall be in accordance with Federal Regulations, 40 C.F.R. 122.7;
2. Any information submitted with reports, records or plans that is considered confidential by the permittee (applicant), and that is not specifically excluded in item (d)1. above, should be clearly labeled "Confidential" and be supported by a statement as to the reason that such information should

be considered confidential. If the Director, with the concurrence of the Regional Administrator, determines that such information is entitled to confidential protection, he shall label and handle same accordingly;

3. Any information accorded confidential status whether or not contained in an NPDES form shall be made available, upon written request, to the Regional Administrator or his authorized representative who shall maintain the information as confidential.

(8) Terms and Conditions of Permits.

- (a) Terms and conditions under which the discharge will be permitted will be specified on the permit issued.
- (b) No NPDES Permit shall be issued authorizing any of the following discharges:
 1. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into navigable waters;
 2. Any discharge which in the judgment of the Secretary of the Army would substantially impair anchorage and navigation in or on any of the waters of the United States;
 3. Any discharge to which the Regional Administrator has objected in writing in accordance with Federal regulations, 40 C.F.R. 123.44, pursuant to any right to object provided the Administrator of EPA under Section 401(d) of the Federal al Act;
 4. Any discharge from a point source which is in conflict with a plan or amendment thereto approved pursuant to Section 208(b) of the Federal Act;
 5. Any discharge to the territorial sea, the waters of the contiguous zone, or the oceans in the following circumstances:
 - (i) Prior to the promulgation of the guidelines under section 403(c) of the Act, unless the Director determines permit issuance to be in the public interest; or
 - (ii) After promulgation of guidelines under section 403(c) of the Act, where insufficient information exists to make a reasonable judgment as to whether the discharge complies with any such guidelines.
 6. To a facility which is a new source or a new discharger, if the discharge from the construction or operation of the facility will cause or contribute to the violation of water quality standards, except as in accordance with Federal Regulations, 40 C.F.R. 122.41, 122.42 and 122.44 and applicable State laws and regulations promulgated thereunder.
- (c) The terms and conditions specified on the permit issued shall be in accordance with Federal Regulations, 40 C.F.R. 122.41, 122.42 and 122.44 and applicable State laws and regulations promulgated thereunder.

- (d) The issuance of a permit does not:
 - 1. Convey any property rights of any sort, or any exclusive privileges;
 - 2. Authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations.

(9) Publicly Owned Treatment Works.

- (a) If the permit is for a discharge from a publicly owned treatment works, notice shall be required from the applicant to the Director of the following:
 - 1. Any new introduction of pollutants into such treatment works from an indirect discharger which would be subject to Section 306 of the Federal Act if it were directly discharging those pollutants;
 - 2. Any new introduction of pollutants into such a treatment works from an indirect discharger subject to Section 301 of the Federal Act if it were directly discharging those pollutants;
 - 3. Any substantial change in volume or character of pollutants being introduced into such treatment works by a source introducing pollutants into such works at the time of issuance of the permit;
- (b) If the permit is for a discharge from a publicly owned treatment works, the permittee shall require any indirect discharger to such treatment works to comply with the requirements of Sections 204(b), 307, and 308 of the Federal Act, including any requirement established under 40 C.F.R. 403. As a means of ensuring compliance with Section 307 of the Federal Act, the permittee shall require each indirect discharger subject to the requirements of said Section 307 to forward to the Director periodic notice of progress (over intervals not to exceed 9 months) toward full compliance with Section 307 requirements.
- (c) If the permit is for a discharge from a publicly owned treatment works, the permittee shall identify, in terms of character and volume of pollutant, any significant indirect dischargers into such treatment works subject to pretreatment standards under Section 307(b) of the Federal Act and 40 C.F.R. 403.

(10) Schedules of Compliance.

- (a) Any person who obtains an NPDES Permit or other discharge permit pursuant to the Act but who is not in compliance with applicable effluent standards and limitations or other requirements contained in such permit at the time same is issued, shall be required to achieve compliance with such standards and limitations or other requirements in accordance with a schedule of compliance as set forth in such permit, or Order by the Director, or in the absence of a schedule of compliance, by the date set forth in such permit which the Director has determined to be in the shortest reasonable period of time necessary to achieve such compliance, but in no case later than an applicable statutory deadline.
- (b) In any case where the period of time for compliance specified in subparagraph 391-3-6-.06(10)(a) of these Rules exceeds 9 months, a schedule of compliance shall be specified which will set forth interim requirements and the dates for their

achievement. In no event shall more than 9 months elapse between interim dates, and, to the extent practicable, the interim dates shall fall on the last day of the months of March, June, September, and December.

- (c) Within fourteen (14) days after an interim date of compliance or the final date of compliance, the permittee shall provide the Director with written notice of its compliance or non-compliance with the requirements or conditions specified to be completed by such date. Failure to submit the written notice is just cause for the EPD to pursue enforcement action pursuant to the Act.
- (d) On the last working day of February, May, August, and November the Director shall submit to EPA information concerning noncompliance with NPDES Permit requirements by major dischargers in the State.
- (e) Any discharger who fails or refuses to comply with an interim or final date of compliance specified in a permit may be deemed by the Director to be in violation of the permit and may be subject to enforcement action pursuant to the Act.

(11) Monitoring, Recording and Reporting Requirements.

Any discharge authorized by a permit issued pursuant to the Act may be subject to such monitoring, recording and reporting requirements as may be reasonably required by the Director including the installation, use and maintenance of monitoring equipment or methods; specific requirements for recording of monitoring activities and results; and periodic reporting of monitoring results. The monitoring, recording and reporting requirements shall be specified in a permit when issued, provided, however, the Director may require additional monitoring, recording and reporting by written notification to the permittee.

- (a) The monitoring requirements of any discharge authorized by any such permit shall be consistent with Federal Regulations, 40 C.F.R. 122.41, 122.42, and 122.44 and applicable State laws.
- (b) Any permit which requires monitoring of the authorized discharge shall comply with the recording requirement specified by Federal Regulations, 40 C.F.R. 122.41 and applicable State laws. The permittee shall be required to retain any records of monitoring activities and results for a minimum of three (3) years, unless otherwise required or extended by the Director upon written notification.
- (c) Any holder of a permit which requires monitoring of the authorized discharge shall report periodically to the EPD the results of all required monitoring activities on appropriate forms supplied by the EPD. The Director shall notify the permittee of the frequency of reporting but in no case shall the reporting frequency be less than once per year.

(12) Modification, Revocation and Reissuance, and Termination of Permits.

- (a) The Director may revise or modify the schedule of compliance set forth in an issued permit if the permittee requests such modification or revision in writing and such modification or revision will not cause an interim date in the compliance schedule to be extended more than one hundred twenty (120) days or affect the

final date in the compliance schedule. The Director may grant requests in accordance with this subparagraph if he determines after documented showing by the permittee that good and valid cause (including Acts of God, strikes, floods, material shortages or other events over which the permittee has little or no control) exists for such revision.

- (b) The Director in accordance with the provisions of Federal Regulations, 40 C.F.R. 122.61, 122.62, 122, 63, 122.64, and 124.5, may modify, revoke and reissue, or terminate an issued permit in whole or in part during its term for cause, including, but not limited to, the causes listed in Federal Regulations, 40 C.F.R. 122.62 and 122.64, or the cause listed in the Act or regulations promulgated pursuant thereto. Prior to any such modification, revocation and reissuance, or termination of an issued permit by the Director (other than modification or revision of a compliance schedule pursuant to subparagraph (a) above, or modification in accordance with the provisions of 40 C.F.R. 122.63), the Director will give public notice in accordance with the procedures set forth in subparagraph 391-3-6-.06(7)(b) and an opportunity for public hearing in accordance with the procedures set forth in subparagraph 391-3-6-.06(7)(c).
 - (c) In the case of a POTW which has received a grant under Section 202(a)(3) of the Federal Act to fund 100% of the costs to modify or replace facilities construction with a grant for innovative and alternative wastewater technology under Section 202(a)(2), the schedule of compliance may be modified to reflect the amount of time lost during construction of the innovative or alternative facility. In no case shall the compliance schedule be modified or extend beyond an applicable statutory deadline for compliance.
 - (d) New sources, new dischargers, sources which recommence discharging after terminating operations and those sources which had been indirect dischargers which commence discharging directly into navigable waters do not qualify for compliance schedules under this paragraph and are subject of Federal Regulations, 40 C.F.R. 122.29(d)(4).
- (13) **Non-governmentally Owned Sewerage Systems.** In cases involving nongovernmentally owned sewerage systems, a trust indenture or other legal contract or agreement, approved by the EPD, assuring continuity of operation of the system, may be required to be filed with the application for a permit. This provision shall not be applicable to systems discharging only industrial waste.
- (14) **Control of Disposal of Pollutants into Wells.** If the permit proposes to discharge to a well or subsurface water, the Director shall specify additional terms and conditions which shall (a) prohibit the proposed disposal, or (b) control the proposed disposal in order to prevent pollution of ground and surface water resources and to protect the public health and welfare. Any permit issued for the disposal of pollutants into wells shall comply with Federal Regulations, and applicable State laws.
- (15) **Duration, Continuation and Transferability of Permits.**
- (a) Any permit issued under Section 10(3) and (4) of the Act shall have a fixed term not to exceed five (5) years. Upon expiration of such permit, a new permit may be issued by the Director in accordance with Section 10(6) of the Act and Federal Regulations 40 C.R.R. 122.9 and 122.64 provided that an application for such new permit is filed with the Director at least 180 days prior to the expiration date

of the existing permit. The issuance of such new permit shall likewise have a fixed term not to exceed five (5) years.

(b) A permit may be transferred to another person by a permittee in accordance with 40 C.F.R. 122.61 if:

1. The permittee notifies the Director of the proposed transfer:
2. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittees (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director; and
3. The Director within thirty (30) days does not notify the current permittee and the new permittee of the EPD's intent to modify, revoke and re issue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

Comment: A new application will be required where the change of ownership is accompanied by a change or proposed change in process or wastewater characteristics or a change or potential change in any circumstances that the Director believes will affect the conditions or restrictions in the permit.

(c) When the permittee has submitted a timely and sufficient application for a new NPDES permit and the Director is unable, through no fault of the permittee, to issue the new permit before the expiration date of the existing permit, then the Director shall extend the existing permit until a new permit is issued.

(d) For those industrial categories for which EPA will establish effluent limitations based on best available technology, permits will be issued to ensure compliance with the effluent limit by the statutory deadline. This will be accomplished by utilizing short-term permits and/or reopener clauses that will allow the permit to be modified, revoked, reissued to comply with limitations promulgated pursuant to the Act and subsequent regulations.

(e) Notwithstanding subparagraph (a) above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in a discharge and such standard prohibition is more stringent than any limitation for such pollutant in a permit, the permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

(16) **Enforcement.** Any person who violates any provision of the Act, any rule promulgated and adopted pursuant thereto, or any term, condition, schedule or compliance or other requirements contained in a permit issued pursuant to the Act shall be subject to enforcement proceedings pursuant to the Act.

(17) **Outfall Identification.** In order to provide the public with information as to the location of permitted outfalls in State waters and to provide the public with a way to contact appropriate persons regarding questions and concerns about these outfalls, the

following persons or entities are required to identify their permitted outfall(s) to the waters of the State:

- 1) any person or entity that has been issued an NPDES permit by the Division for a point source discharge of treated process wastewater or treated domestic sewage to waters of the State
- 2) any person or entity that has an NPDES permit for the discharge of cooling water and that discharges one million gallons or more of cooling water per day. The outfalls are to be identified by attaching a sign to the outfall or by posting a sign adjacent to the outfall in such a way that the sign shall be visible from the receiving water. Should the outfall be submerged, then the sign shall be posted on the bank as close to the outfall as possible. The sign shall be made of materials that are durable to typical weather conditions. At a minimum, the sign shall be 15 inches square. For facilities that discharge sanitary wastewater, the sign shall include the following information:
 - 1) the words "Treated Wastewater"
 - 2) the facility name including the name of the government body if owned by a local government
 - 3) the words "Permit #" followed by the last five digits of the facility's NPDES Permit number
 - 4) the words "Outfall Number" followed by the actual outfall number
 - 5) the words "Owner Phone" followed by the facility's phone number
 - 6) EPD's name and phone number. For facilities that discharge treated process wastewater or cooling water, the sign shall include the following information:
 - 1) the words "Treated Industrial Water" or "Cooling Water"
 - 2) the words "Permit #" followed by the last five digits of the facility's NPDES Permit Number
 - 3) the words "Outfall Number" followed by the actual outfall number
 - 4) EPD's name and phone number. In the case of permittees who have been issued a general permit instead of an individual permit, EPD will provide the permittee with a unique 5 digit number to use as a permit number on the sign. The sign is to be posted no later than 12 months after the effective date of this rule and it is to be properly maintained from that point forward. Provided that a good faith effort is made and documented by the person or entity to maintain such sign, the person or entity shall be deemed in compliance with this Rule and the Georgia Water Quality Control Act. The requirement to identify an outfall will not apply if any of the following conditions apply:
 - 1) If the posting of the sign would be inconsistent with any other State or Federal Statute
 - 2) If the outfall to the receiving water is located on private property which is restricted to the public through fencing, patrolling, or posting. If the property

access restriction is accomplished by the posting of signs, then in order to qualify under exemption number 2 above the posted signs restricting access must be no more than 100 feet apart along the periphery of the property.

- (18) **Effective date.** This Rule shall become effective twenty days after filing with the Secretary of State's office.

Cite as Ga. Comp. R. & Regs. R. 391-3-6-.06

Authority: O.C.G.A. Sec. 12-5-20 et seq.

History. Original Rule entitled "Waste Treatment and Permit Requirements" adopted. F. June 10, 1974; eff. June 30, 1974.

Repealed: New Rule of the same title adopted. F. June 24, 1980; eff. July 14, 1980.

Amended: F. Dec. 9, 1988; eff. Dec. 29, 1988.

Amended: ER 391-3-6-0.18-.06 adopted. F. Aug. 25, 1989; eff. Aug. 23, 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. July 6, 1990; eff. July 26, 1990.

Amended: F. Feb. 15, 1991; eff. Mar. 7, 1991.

Amended: F. Apr. 8, 1993; eff. Apr. 28, 1993.

Amended: F. May 9, 1994; eff. May 29, 1994.

Amended: F. Aug. 30, 1995; eff. Sept. 19, 1995.

Amended: ER. 391-3-6-0.32-.06 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. May 2, 1997; eff. May 22, 1997.

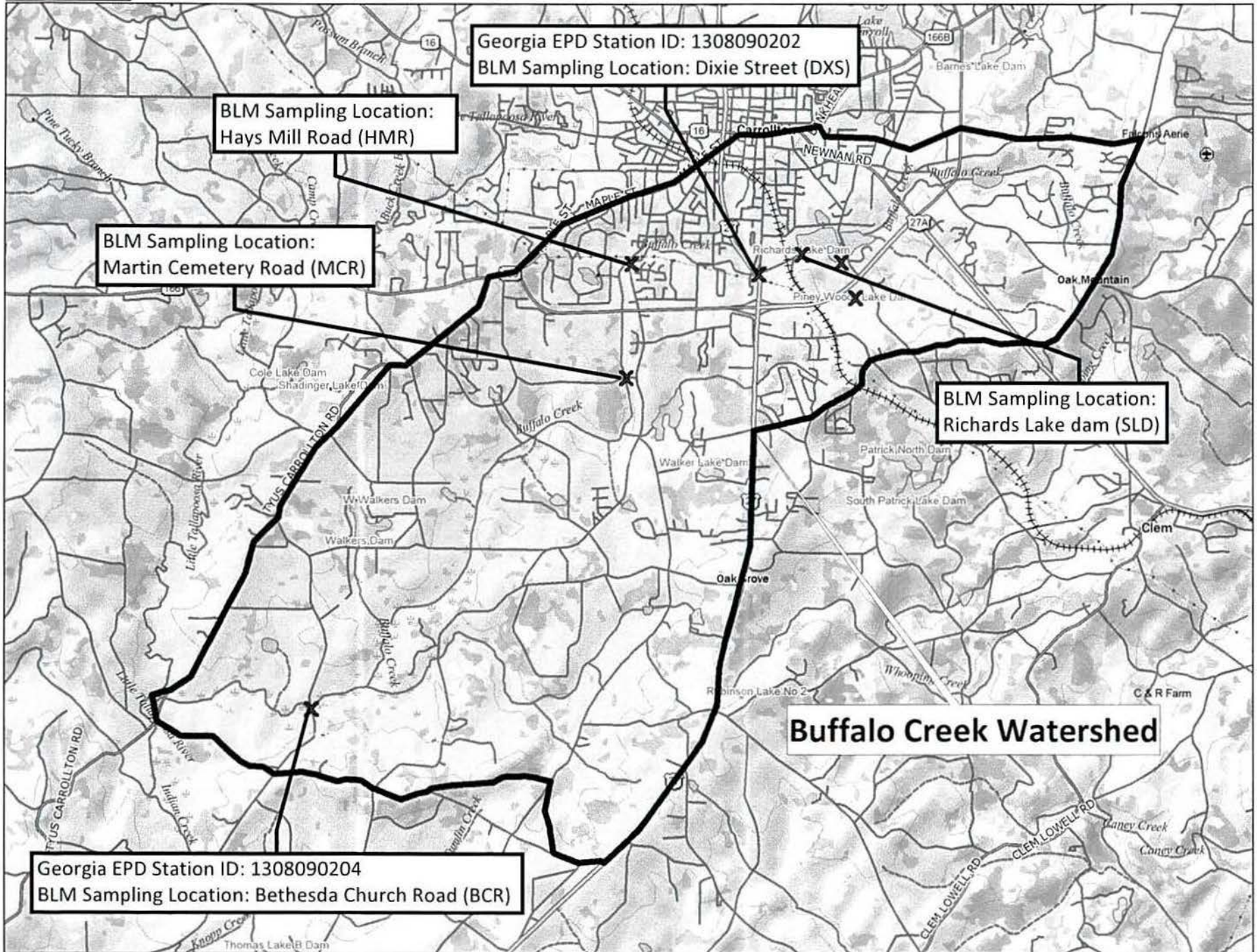
Amended: F. Nov. 3, 1998; eff. Nov. 23, 1998.

Amended: F. June 26, 2000; eff. July 16, 2000.

Amended: F. Oct. 26, 2001; eff. Nov. 15, 2001.

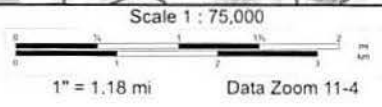
Amended: F. Oct. 2, 2015; eff. Oct. 22, 2015.

Appendix C (Buffalo Creek Affected by Site Specific BLM)



Buffalo Creek Watershed

Biotic Ligand Model Report for Site-Specific Copper Water Quality Standard, Buffalo Creek, Carroll County, GA
Figure 1: Buffalo Creek Watershed Topography, Drainage Area and EPD Sampling Locations



Appendix D (Email from Pete Pattavina Regarding Buffalo Creek and Listed Bats)

Poe, Jason

From: Pattavina, Pete <pete_pattavina@fws.gov>
Sent: Tuesday, April 12, 2016 4:01 PM
To: Poe, Jason; Anthony Sowers
Subject: Copper criterion at Buffalo Creek, Carroll County, Georgia

Hi, Jason. Nice talking to you on the telephone today. I don't see much issue with your not likely to adversely affect listed bat species with the new designation for Buffalo Creek. I've copied and pasted two abstracts that I recently saw at the last Southeastern Bat Diversity Network Meeting. Not sure if these will be helpful at all, but just wanted to close the loop on what we discussed.

Pete

TROPHIC TRANSFER OF MICROCYSTIN FROM A FRESHWATER LAKE TO LITTLE BROWN BATS
D. N. JONES*, M. M. WOLLER-SKAR, AND A. L. RUSSELL. Grand Valley State University, 1 Campus Drive, Allendale, MI 49401
Microcystis aeruginosa is a type of cyanobacteria capable of producing a hepatotoxin called microcystin. As toxic *M. aeruginosa* overwinters in the sediments of lakes, it is ingested by some mayfly larvae, such as those of *Hexagenia* spp., and thus microcystin bioaccumulates in these insects. When *Hexagenia* emerge from lakes to reproduce, they provide an abundant, albeit temporary, food source for many terrestrial organisms such as bats. Little brown bats, *Myotis lucifugus*, likely feed opportunistically on aquatic insects. To test if microcystin moves from aquatic to terrestrial ecosystems via trophic transfer, we 1) tested bat feces for the presence of *Hexagenia* mayflies, and 2) tested bat livers and feces for microcystin. In June 2014, in correspondence with the *Hexagenia* emergence, bat feces were collected from underneath a maternity roost near Little Traverse Lake (Leelanau County, MI). On 20 and 27 June we caught 19 female *M. lucifugus*, which were euthanized, and collected their livers and feces. DNA was extracted from feces, amplified with a Polymerase Chain Reaction (PCR), and sequenced. Concentrations of microcystin in liver tissue and feces were determined using an Enzyme-linked Immunosorbent Assay (ELISA) and Liquid Chromatography with Tandem Mass Spectrometry (LC-MS). *Hexagenia* were present in the diet of *M. lucifugus* and the most likely source of microcystin. Our analyses reveal that microcystin was also present, with higher concentrations in the bat feces than the livers. Additionally, histopathology results of three bat livers with highest concentrations of microcystin show little to no cytological damage from the toxin. From these data, it appears that *M. lucifugus* are not highly affected by the ingestion of microcystin.

ORGANOCHLORIDE PESTICIDES PRESENT IN THE FUR OF BATS AND RODENTS IN AN AGRICULTURAL REGION OF SOUTHEASTERN ARKANSAS
MATTHEW E. GRILLIOT, JOHN L. HUNT, AND CHRISTOPHER G. SIMS. Troy University Montgomery, Department of Arts and Sciences, 126 Church Street, Montgomery, AL 36104 (MEG); University of Arkansas at Monticello, School of Mathematical and Natural Sciences, 397 University Drive, Monticello, AR 71656 (JLH and CGS)
Bats in agricultural settings may be prone to bioaccumulation toxins. A maternity colony of Rafinesque's big-eared bats (*Corynorhinus rafinesquii*) roosts in an abandoned building between an agricultural field and Bayou Bartholomew in Drew County, Arkansas. On July 30, 2014, 3 males and 7 females were captured by hand net; blood and hair samples were taken from each. Samples from 5 individuals were sent to the Center of Environmental Sciences and Engineering at the University of Connecticut for analysis. Results indicated significant levels of dichlorodiphenyltrichloroethane (DDT) or its metabolite dichlorodiphenyldichloroethylene (DDE) in the fur of 2 bats. One bat had DDT at 3,929 parts per billion (ppb) in the fur; another had DDE at 14,545 ppb. Blood samples did not have measureable levels of toxins. Additionally, we collected hair and blood from a hispid cotton rat (*Sigmodon hispidus*) during the study, and found DDE at 5323 ppb in the fur. Later, we collected hair samples from 7 white footed deermice (*Peromyscus leucopus*) at the same site. One individual had

dichlorodiphenyldichloroethane (4,4-DDD), another metabolite of DDT, at 629 ppb, and another had trans-nonachlor, a component of chlordane at 647 ppb. DDT was banned in the United States in 1972 due to risks to the environment and human health; chlordane was banned in 1988. This study raises questions about environmental persistence of DDT/DDE and other organochlorides. There may be risk to wildlife populations, warranting further investigation into effects of long-term exposure to these toxins.

--

Pete Pattavina
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
105 West Park Drive, Suite D
Athens, GA 30606
706-613-9493, ext. 236

Literature Cited

- Best et al. 1997. Diet of *Myotis grisescens*. *Journal of Mammology*. 78(2): 569-583.
- Brady, J., T. Kunz, M. D. Tuttle, and D. Wilson. 1982. Gray Bat Recovery Plan. U.S. Fish Wildlife Service 140 pp.
- Brady, J., R. L. Clawson, R. K. LaVal, T. Kunz, M. D. Tuttle, and D. Wilson. 1983. Recovery plan for the Indiana Bat. U. S. Fish Wildlife Service, Rockville, Maryland. 94 pp.
- Barbour, R. W., and W. H. Davis. 1969. *Bats of America*. The University of Kentucky Press, Lexington, Kentucky.
- Caceres, M. C., and R. M. R. Barclay. 2000. *MYOTIS SEPTENTRIONALIS*. *Mammalian Species* No. 634:1-4.
- Caire, W., J. D. Tyler, B. P. Glass, and M. A. Mares. 1989. *Mammals of Oklahoma*. University of Oklahoma Press, Norman, Oklahoma. 567 pp.
- Center for Biological Diversity. 2010. Petition to list the Eastern Small-footed Bat *Myotis leibii* and Northern Long-eared Bat *Myotis septentrionalis* as threatened or endangered under the Endangered Species Act. Center for Biological Diversity, P.O. Box 188, Richmond, VT
- Clark, D. R., R. K. LaVal, and D. M. Swineford. 1978. Dieldrin-induced mortality in an endangered species, the Gray Bat (*MYOTIS GRISESCENS*). *Science* 199:1357-9.
- Clark, D. R., R. K. LaVal, and M. D. Tuttle. 1982. Estimating pesticide burdens of bats from guano analyses. *Bull. Environ. Contam. Toxicol.* 29:214-20.
- Clark, D. R., R. K. LaVal, and A. J. Krynitsky. 1980. Dieldrin and heptachlor residue in dead Gray Bats, Franklin County, Missouri, USA: 1976 vs 1977. *Pesticide Monitoring Journal* 13:137-40.
- Decher, J., and J. R. Choate. 1995. *MYOTIS GRISESCENS*. *Mammalian Species* (510):1-7.
- Fenton, M. B. 1982. Echolocation, insect hearing, and feeding ecology of insectivorous bats. Pages 261-85 in T. H. Kunz (editor). *Ecology of Bats*. Plenum Press, New York, New York.
- Fremling, C. R. 1968. Documentation of a mass emergence of *Hexagenia* mayflies from the Upper Mississippi River. *Trans. Amer. Fish Soc.* 97:278-80.
- Gangloff, M. M., and Feminella, J. W., in press, Distribution and status of freshwater mussels (*Bivalvia: Unionidae*) in the Upper Alabama (Coosa and Lower Tallapoosa) drainage, Alabama: Auburn University, Alabama, Department of Biological Sciences, 121 p.
- Gargas, A., M. T. Trest, M. Christensen, T. J. Volk, and D. Blehert. 2009. *Geomyces destructans* sp. nov. associated with bat white-nose syndrome. *Mycotaxon* 108: 147 – 154.

- Griffith, L. A., and J. E. Gates. 1985. Food habits of cave-dwelling bats in the central Appalachians, *Journal of Mammalogy* 66(3):451-60.
- Hall, J. S. 1962. A life history and taxonomic study of the Indiana Bat, *Myotis sodalis*. Reading Publication Museum Art Gallery, Science Publication 12. 68 pp.
- Hall, E. R. 1981. *The Mammals of North America*, 2nd. Ed., 2 Vols. John Wiley and Sons, New York 1181 pp.
- Hamilton, W. J., Jr., and J. O. Whitaker, Jr. 1979. *Mammals of the eastern United States*. Cornell Univ. Press, Ithaca, New York. 346 pp.
- Harvey, M. J. 1992. *Bats of the eastern United States*, Arkansas Game and Fish Commission in cooperation with the U. S. fish and Wildlife Service and Tennessee Technological University, Little Rock, AR.
- Harvey, M. J., J. R. MacGregor, and R. R. Currie. 1991. Distribution and status of Chiroptera in Kentucky and Tennessee. *J. of Tenn. Acad. of Sci.* 66(4):191-193.
- Herkert, J. R., editor. 1992. *Endangered and threatened species of Illinois: status and distribution*. Vol. 2: Animals. Illinois Endangered Species Protection Board. iv + 142 pp.
- Jackson, H. H. 1961. *Mammals of Wisconsin*. University of Wisconsin Press, Madison. 504 pp.
- Kunz, T. H. 1971. Reproduction of some vespertilionid bats of central Iowa. *Amer. Midl. Nat.* 86(2):477-86.
- Kunz, T. H. 1973. Resource utilization: Temporal and spatial components of bat activity in central Iowa. *Journal of Mammalogy* 54(1):14-32
- Kurta, A. 1982. A review of Michigan Bats: Seasonal and geographic distribution. *Mich. Acad.* 14(3):295-312.
- Langwig, K., A. Hicks, R. von Linden, C. Herzog, S. Darling, T. French, and J. Armstrong. 2009. White nose syndrome related declines of hibernating bat species in the Northeast. Presentation at 2009 North American Society for Bat Research symposium, Portland, Oregon.
- LaVal, R. K., R. L. Clawson, M. L. LaVal and W. Caire. 1977. Foraging Behavior and Nocturnal Activity Patterns of Missouri Bats, with Emphasis on the endangered species *Myotis grisescens* and *Myotis sodalis*. *Journal of Mammalogy* 58(4):592-599
- LaVal, R. K., and M. L. LaVal. 1980. *Ecological studies and management of Missouri bats, with emphasis on cave dwelling species*. Terrestrial Series 8, Missouri Department of Conservation.

Layne, J. N., editor. 1978. Rare and endangered biota of Florida. Vol. 1. Mammals. State of Florida Game and Freshwater Fish Commission. xx + 52 pp.

Matthews, J.R. and C.J. Moseley (eds.). 1990. The Official World Wildlife Fund Guide to Endangered Species of North America. Volume 1. Plants, Mammals. xxiii + pp 1-560 + 33 pp. appendix + 6 pp. glossary + 16 pp. index. Volume 2. Birds, Reptiles, Amphibians, Fishes, Mussels, Crustaceans, Snails, Insects, and Arachnids. xiii + pp. 561-1180. Beacham Publications, Inc., Washington, D.C.

Mohr, C. E. 1972. The status of threatened species of cave-dwelling bats. Bull. Nat. Speleol. Soc. 34(2):33-47

Mumford, R.E. and J.B. Cope. 1964. Distribution and status of the Chiroptera of Indiana. American Midland Naturalist 72(2):473-489.

Nagorsen, D. W. and R. M. Brigham. 1993. Bats of British Columbia. Vol. I. The Mammals of British Columbia. UBC Press, Vancouver, 164 pp.

NatureServe. 2014c. *Myotis septentrionalis*. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. Updated March 2014; accessed January 2015.
<http://explorer.natureserve.org/servlet/NatureServe?searchSciOrCommonName=Myotis+septentrionalis&x=8&y=9>.

NatureServe. 2015. *Ptychobranhus subtentum* NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Updated January 2015 (Accessed: March, 2016).
http://explorer.natureserve.org/servlet/NatureServe?loadTemplate=tabular_report.wmt&paging=home&save=all&sourceTemplate=reviewMiddle.wmt

Richter, A. R., et al. 1993. Modified cave entrances: thermal effect on body mass and resulting decline of endangered Indiana Bats (MYOTIS SODALIS). Conservation Biology 7:407

Sparks, D. W., C. M. Ritzi, J. E. Duchamp, and J. O. Whitaker, Jr. 2005. Foraging habitat of the Indiana Bat (*Myotis sodalis*) at an urban-rural interface. Journal of Mammalogy 86:713-718.

Thomas, D. W. 1995. Hibernating bats are sensitive to nontactile human disturbance. Journal of Mammalogy 76:940-946 Organisms and Their Uses. EPA 822-R85-100, Office of Research and Development, Washington, D.C.

Tuttle, M. D. 1977. Gating as a means of protecting cave dwelling bats. Pages 77-82 in T. Aley and D. Rhodes, editors. National cave management symposium proceedings.

Tuttle, M. D., and D. E. Stevenson. 1977. An analysis of migration as a mortality factor in the Gray Bat based on public recoveries of banded bats. Am. Midl. Nat. 97:235-40.

Tuttle, M. D. 1979. Status, causes of decline, and management of endangered Gray Bats. *Journal of Wildlife Management* 43:1-17.

Tuttle, M. D. 1979. Twilight for the Gray Bat. *Nat. Parks Conserv. Mag.* 53:12-15.

Twente, J. W. 1955. Some aspects of habitat selection and other behavior of cavern-dwelling bats. *Ecology* 36:706-32.

USEPA. 2007. Aquatic Life Ambient Freshwater Quality Criteria – Copper (EPA-822-R-07-001, February 2007), Office of Water, Washington, D.C.

U.S. Fish and Wildlife Service. 1999. Agency draft Indiana Bat (*Myotis sodalis*) revised recovery plan. U.S. Fish and Wildlife Service, Fort Snelling, Minnesota. 53 pp.

U.S. Fish and Wildlife Service. 29 June 2011. 90-day finding on a petition to list the Eastern Small-footed Bat and the Northern Long-eared Bat as threatened or endangered. *Federal Register* 76(125):38095-38106.

van Zyll de Jong, C. G. 1985. Handbook of Canadian Mammals, Volume 2. Bats. National Museums of Canada, Ottawa, Ontario, Canada. 212 pp.

Whitaker, J. O. Jr. 1972. Food habits of bats from Indiana. *Can. J. Zoology.* 50:877-83.