ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION - WATER QUALITY PROGRAM

CHAPTER 335-6-10 WATER QUALITY CRITERIA

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335-6-10-.01 <u>Purpose</u>.

(1) Title 22, Section 22-22-1 <u>et seq.</u>, <u>Code of Alabama</u> 1975, includes as its purpose "... to conserve the waters of the State and to protect, maintain and improve the quality thereof for public water supplies, for the propagation of wildlife, fish and aquatic life and for domestic, agricultural, industrial, recreational and other legitimate beneficial uses; to provide for the prevention, abatement and control of new or existing water pollution; and to cooperate with other agencies of the State, agencies of other states and the federal government in carrying out these objectives."

(2) Water quality criteria, covering all legitimate water uses, provide the tools and means for determining the manner in which waters of the State may be best utilized, provide a guide for determining waste treatment requirements, and provide the basis for standards of quality for State waters and portions thereof. Water quality criteria are not intended to freeze present uses of water, nor to exclude other uses not now possible. They are not a device to insure the lowest common denominator of water quality, but to encourage prudent use of the State's water resources and to enhance their quality and productivity commensurate with the stated purpose of Title 22, Section 22-22-1 et seq., Code of Alabama 1975.

(3) Water quality criteria herein set forth have been developed by the Commission for those uses of surface waters known and expected to exist over the State. They are based on present scientific knowledge, experience and judgment. Characteristics or parameters included in the criteria are those of

fundamental significance to a determination of water quality and are those which are and can be routinely monitored and compared to data that are generally available. It is the intent that these criteria will be applied only after reasonable opportunity for mixture of wastes with receiving waters has been afforded. The reasonableness of the opportunity for mixture of wastes and receiving waters shall be judged on the basis of the physical characteristics of the receiving waters and approval by the Department of the method in which the discharge is physically made.

Author: James E. McIndoe. **Statutory Authority:** <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

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335-6-10-.02 <u>Definitions</u>.

(1) "<u>Coastal Waters</u>" means those waters, adjacent to the shoreline, and lying seaward of the continuous 10 foot contour extending seaward to the outer limit of the United States territorial sea which contain a measureable quantity or percentage of sea water, including but not limited to, sounds, bays, lagoons, bayous, ponds, and estuaries.

(2) "<u>Commission</u>" means the Environmental Management Commission, established by the Environmental Management Act, <u>Code of Alabama</u> 1975, §§ 22-22A-1 to 22-22A-16.

(3) "<u>Department</u>" means the Alabama Department of Environmental Management, established by the Alabama Environmental Management Act, <u>Code of Alabama</u> 1975, §§ 22-22A-1 to 22-22A-16.

(4) "<u>Existing Uses</u>" means those legitimate beneficial uses of a water body attained in fact on or after November 28, 1975, whether or not they are included as classified uses in ADEM Administrative Code rule 335-6-11-.02.

(5) "<u>Industrial Waste</u>" means liquid or other wastes resulting from any process of industry, manufacture, trade or business or from the development of natural resources.

(6) "<u>NPDES</u>" means National Pollutant Discharge Elimination System.

(7) "<u>Other Wastes</u>" means all other substances, whether liquid, gaseous or solid, from all other sources including, but not limited to, any vessels, or other conveyances traveling or using the waters of this State, except industrial wastes or sewage, which may cause pollution of any waters of the State.

(8) "<u>Pollutant</u>" includes but is not limited to dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions,

chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. Pollutant does not mean (a) sewage from vessels; or (b) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State, and if the Department determines that such injection or disposal will not result in the degradation of ground or surface water resources.

(9) "<u>Pollution</u>" means the discharge of a pollutant or combination of pollutants.

(10) "<u>Sewage</u>" means water-carried human wastes from residences, buildings, industrial establishments or other places including, but not limited to, any vessels, or other conveyances traveling or using the waters of this State, together with such ground, surface, storm or other waters as may be present.

(11) "<u>State Waters</u>" or "<u>Waters of the State</u>" means all waters of any river, stream, watercourse, pond, lake, coastal, or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce.

Author: James E. McIndoe; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

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335-6-10-.03 <u>Water Use Classifications</u>.

- (1) Outstanding Alabama Water
- (2) Public Water Supply
- (3) Swimming and Other Whole Body Water-Contact Sports
- (4) Shellfish Harvesting
- (5) Fish and Wildlife
- (6) Limited Warmwater Fishery
- (7) Agricultural and Industrial Water Supply

Author: James E. McIndoe.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: May 5, 1967. **Amended:** June 19, 1967; July 17, 1972; February 26, 1973; May 30, 1977; December 19, 1977; February 4, 1981; December 30, 1992; September 7, 2000.

335-6-10-.04 Antidegradation Policy.

(1) The purpose and intent of the water quality standards is to conserve the waters of the State of Alabama and to protect, maintain and improve the quality thereof for public water supplies, for the propagation of wildlife, fish and aquatic life, and for domestic, agricultural, industrial, recreational and other legitimate beneficial uses; and to provide for the prevention, abatement and control of new or existing water pollution.

(2) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. Uses and the water quality to support such uses were established through public participation in the initial establishment, and periodic review, of water quality standards. Should the Department determine that an existing use is not encompassed in the classification of a waterbody, that use shall be recognized.

(3) 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, except that a new or increased discharge of pollutants may be allowed, after intergovernmental coordination and public participation pursuant to applicable permitting and management processes, when the person proposing the new or increased discharge of pollutants demonstrates that the proposed discharge is necessary for important economic or social development. In such cases, water quality adequate to protect existing uses fully shall be maintained. All new and existing point source discharges shall be subject to the highest statutory and regulatory requirements, and nonpoint source discharges shall use best management practices adequate to protect water quality consistent with the Department's nonpoint source control program.

(4) Where high quality waters constitute an outstanding National resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(5) Developments constituting a new or increased source of thermal pollution shall assure that such release will not impair the propagation of a balanced indigenous population of fish and aquatic life.

(6) In applying these policies and requirements, the State of Alabama will recognize and protect the interests of the federal government. Toward this end the Department will consult and cooperate with the Environmental Protection Agency on all matters affecting the federal interest.

Author: James E. McIndoe.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

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335-6-10-.05 General Conditions Applicable to All Water Quality Criteria.

(1) The quality of any waters receiving sewage, industrial wastes or other wastes, regardless of their use, shall be such as will not cause the best usage of any other waters to be adversely affected by such sewage, industrial wastes or other wastes.

(2) Tests or analytical procedures to determine compliance or noncompliance with water quality criteria shall be in accordance with the methods specified in 40 CFR 136.3 (2003). Where other tests or analytical procedures are found to be more applicable and satisfactory, these may be used upon acceptance and approval by the Department.

(3) In making any tests or analytical determinations to determine compliance or noncompliance with water quality criteria, samples shall be collected in such manner and at such locations approved by a duly authorized representative of the Department as being representative of the receiving waters after reasonable opportunity for dilution and mixture with the wastes discharged thereto. Mixing zones, i.e., that portion of the receiving waters where mixture of effluents and natural waters take place, shall not preclude passage of freeswimming and drifting aquatic organisms to the extent that their populations are significantly affected.

(4) Natural waters may, on occasion, have characteristics outside of the limits established by these criteria. The criteria contained herein relate to the condition of waters as affected by the discharge of sewage, industrial wastes or other wastes, not to conditions resulting from natural forces.

(5) All waters, where attainable, shall be suitable for recreation in and on the waters during the months of May through October except that recreational use is not recommended in the vicinity of discharges or other conditions which the Department or the Department of Public Health does not control.

(6) Where necessary to attain compliance with a new water quality standard, existing permits for the discharge of wastewaters shall be modified or reissued to limit the discharge of a substance causing or contributing to the failure of a water of the state to meet the new standard. Compliance with the modified limit shall be required as soon as practical, but in all cases within three years of the adoption of the new standard.

Author: James E. McIndoe; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

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335-6-10-.06 <u>Minimum Conditions Applicable to All State Waters</u>. The following minimum conditions are applicable to all State waters, at all places and at all times, regardless of their uses:

(a) State waters shall be free from substances attributable to sewage, industrial wastes or other wastes that will settle to form bottom deposits which are unsightly, putrescent or interfere directly or indirectly with any classified water use.

(b) State waters shall be free from floating debris, oil, scum, and other floating materials attributable to sewage, industrial wastes or other wastes in amounts sufficient to be unsightly or interfere directly or indirectly with any classified water use.

(c) State waters shall be free from substances attributable to sewage, industrial wastes or other wastes in concentrations or combinations which are toxic or harmful to human, animal or aquatic life to the extent commensurate with the designated usage of such waters.

Author: James E. McIndoe.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: May 5, 1967. **Amended:** June 19, 1967; July 17, 1972; February 26, 1973; May 30, 1977; December 19, 1977; February 4, 1981.

335-6-10-.07 Toxic Pollutant Criteria Applicable to State Waters.

(1) The U.S. Environmental Protection Agency has listed the chemical constituents given in Table 1 as toxic pollutants pursuant to Section 307(a)(1) of the Federal Water Pollution Control Act (FWPCA). Concentrations of these toxic pollutants in State waters shall not exceed the criteria indicated in Table 1 to the extent commensurate with the designated usage of such waters.

(a) The freshwater and marine aquatic life criteria for certain pollutants are dependent on hardness or pH. For these pollutants, the criteria are given by the following equations. In the hardness-dependent equations for metals, a conversion factor converts the total recoverable value to a criterion expressed as the dissolved fraction in the water column. All numeric values listed for metals in Table 1 at the end of this chapter are expressed as dissolved metals unless otherwise noted.

- 1. Cadmium
- (i) freshwater acute aquatic life:

conc. $(\mu g/l) = (e^{(1.0166[\ln(hardness in mg/l as CaCO_3)]-3.924)})(CF);$ (Eq. 1) conversion factor (CF) = 1.136672-[ln(hardness)(0.041838)]

(ii) freshwater chronic aquatic life:

conc. $(\mu g/l) = (e^{(0.7409[ln(hardness in mg/l as CaCO_3)]-4.719]})(CF);$ (Eq. 2) conversion factor (CF) = 1.101672-[ln(hardness)(0.041838)]

- 2. Chromium (trivalent)
- (i) freshwater acute aquatic life:

conc. $(\mu g/l) = (e^{(0.8190[\ln(hardness in mg/l as CaCO_3)]+3.7256)})(CF);$ (Eq. 3) conversion factor (CF) = 0.316

- (ii) freshwater chronic aquatic life: conc. $(\mu g/l) = (e^{(0.8190[ln(hardness in mg/l as CaCO_3)]+0.6848)})(CF);$ (Eq. 4) conversion factor (CF) = 0.860
- 3. Copper
- (i) freshwater acute aquatic life: conc. $(\mu g/l) = (e^{(0.9422[ln(hardness in mg/l as CaCO_3)]-1.700)})(CF);$ (Eq. 5) conversion factor (CF) = 0.960
- (ii) freshwater chronic aquatic life: conc. $(\mu g/l) = (e^{(0.8545[ln(hardness in mg/l as CaCO_3)]-1.702)})(CF);$ (Eq. 6) conversion factor (CF) = 0.960
- 4. Lead
- (i) freshwater acute aquatic life: conc. $(\mu g/l) = (e^{(1.273[ln(hardness in mg/l as CaCO_3)]-1.460)})(CF);$ (Eq. 7) conversion factor (CF) = 1.46203-[ln(hardness)(0.145712)]
- (ii) freshwater chronic aquatic life: conc. $(\mu g/l) = (e^{(1.273[ln(hardness in mg/l as CaCO_3)]-4.705)})(CF);$ (Eq. 8) conversion factor (CF) = 1.46203-[ln(hardness)(0.145712)]

5. Nickel (i) freshwater acute aquatic life: conc. $(\mu g/l) = (e^{(0.8460[\ln(hardness in mg/l as CaCO_3)]+2.255)})(CF);$ (Eq. 9) conversion factor (CF) = 0.998freshwater chronic aquatic life: (ii) conc. $(\mu g/l) = (e^{(0.8460[\ln(hardness in mg/l as CaCO_3)]+0.0584)})(CF);$ (Eq. 10) conversion factor (CF) = 0.9976. Pentachlorophenol (i) freshwater acute aquatic life: conc. $(\mu g/l) = e^{[1.005(pH)-4.869]}$ (Eq. 11) (ii) freshwater chronic aquatic life: conc. $(\mu g/l) = e^{[1.005(pH)-5.134]}$ (Eq. 12) 7. Silver (i) freshwater acute aquatic life: conc. $(\mu g/l) = (e^{(1.72[\ln(hardness in mg/l as CaCO_3)]-6.59)})(CF);$ (Eq. 13) conversion factor (CF) = 0.858. Zinc (i) freshwater acute aquatic life: conc. $(\mu g/l) = (e^{(0.8473[\ln(hardness in mg/l as CaCO_3)]+0.884)})(CF);$ (Eq. 14) conversion factor (CF) = 0.978(ii) freshwater chronic aquatic life: conc. $(\mu g/l) = (e^{(0.8473[\ln(hardness in mg/l as CaCO_3)]+0.884)})(CF);$ (Eq. 15)

conversion factor (CF) = 0.986

(b) The marine aquatic life criteria apply only to coastal waters of the Escatawpa River Basin, coastal waters of the Mobile River - Mobile Bay Basin, and coastal waters of the Perdido River Basin, as identified in rule 335-6-11-.02 of the Department's regulations. The acute aquatic life criteria apply to all waters of the State. The chronic aquatic life criteria apply only to waters classified

Outstanding Alabama Water, Public Water Supply, Swimming and Other Whole Body Water-Contact Sports, Shellfish Harvesting, Fish and Wildlife, and Limited Warmwater Fishery, as identified in rule 335-6-11-.02 of the Department's regulations.

(c) For the purpose of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 10 years ($7Q_{10}$) shall be the basis for applying the chronic aquatic life criteria, except as noted in rule 335-6-10-.09(6), and the minimum 1-day low flow that occurs once in 10 years ($1Q_{10}$) shall be the basis for applying the acute aquatic life criteria, except as noted in rule 335-6-10-.09(7)(c)(5). Where a permit specifies a minimum flow greater than $7Q_{10}$, the specified minimum flow may be used as the basis for applying the acute and chronic aquatic life criteria for that permit.

(d) Except as noted in Table 1, two human health criteria are provided for each pollutant--a criterion for consumption of water and fish, and a criterion for consumption of fish only. For certain pollutants, the human health criterion for consumption of water and fish may represent a maximum contaminant level (MCL) developed under the Safe Drinking Water Act.

1. For pollutants classified by the U.S. Environmental Protection Agency as non-carcinogens, the criteria shall be given by the following equations, except where numeric values are given in Table 1.

(i) (Consump	tion of water and fish:	
conc. (r	ng/l) =	(HBW x RfD x RSC)/[(FCR x BCF) + WCR]	(Eq. 16)
(ii) (Consump	tion of fish only:	
conc. (r	ng/l) =	(HBW x RfD x RSC)/(FCR x BCF)	(Eq. 17)

where (in Equations 16 and 17):

HBW = human body weight, set at 70 kg

RfD = reference dose, in mg/(kg-day)

RSC = relative source contribution

FCR = fish consumption rate, set at 0.030 kg/day

BCF = bioconcentration factor, in 1/kg

WCR = water consumption rate, set at 2 l/day

(iii) The values used for the reference dose (RfD) shall be values available through the U.S. Environmental Protection Agency's Integrated Risk

Information System (IRIS), and values used for the bioconcentration factor (BCF) and relative source contribution (RSC) shall be values contained in ambient water quality criteria documents published by the U.S. Environmental Protection Agency, except where other values are established pursuant to subparagraph (1)(g). The RfD, RSC, and BCF values for specific pollutants are provided in Appendix A.

2. For pollutants classified by the U.S. Environmental Protection Agency as carcinogens, the criteria shall be given by the following equations, except where numeric values are given in Table 1.

(i) Consumption of water and fish:
conc. (mg/l) = (HBW x RL)/(CPF x [(FCR x BCF) + WCR]) (Eq. 18)
(ii) Consumption of fish only:
conc. (mg/l) = (HBW x RL)/(CPF x FCR x BCF) (Eq. 19)

where (in Equations 18 and 19):

HBW = human body weight, set at 70 kg

RL = risk level, set at $1 \ge 10^{-6}$ (except for arsenic which is set at $1 \ge 10^{-5}$)

CPF = cancer potency factor, in (kg-day)/mg

FCR = fish consumption rate, set at 0.030 kg/day

BCF = bioconcentration factor, in 1/kg

WCR = water consumption rate, set at 2 1/day

(iii) The values used for the cancer potency factor (CPF) shall be values available through the U.S. Environmental Protection Agency's Integrated Risk Information System (IRIS), and values used for the bioconcentration factor (BCF) shall be values contained in ambient water quality criteria documents published by the U.S. Environmental Protection Agency, except where other values are established pursuant to subparagraph (1)(g). The CPF and BCF values for specific pollutants are provided in Appendix A.

(e) The criteria given in Table 1 for consumption of water and fish, or computed from equation 16 or equation 18 for consumption of water and fish, shall apply only to those waters of the State classified Public Water Supply, as identified in rule 335-6-11-.02 of the Department's regulations. The criteria given in Table 1 for consumption of fish only, or computed from equation 17 or equation 19 for consumption of fish only, shall apply to all waters of the State.

(f) For the purposes of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 10 years ($7Q_{10}$) shall be the basis for applying the human health criteria for pollutants classified as non-carcinogens, and the mean annual flow shall be the basis for applying the human health criteria for pollutants classified as carcinogens; except that where a permit specifies a minimum flow greater than $7Q_{10}$, the specified minimum flow may be used as the basis for applying the human health criteria for pollutants classified as non-carcinogens for that permit.

(g) Numeric criteria may be computed by the Department from equations 16, 17, 18, and 19 using values for the reference dose (RfD), relative source contribution (RSC), cancer potency factor (CPF), and bioconcentration factor (BCF) determined by the Department in consultation with the Alabama Department of Public Health after review of information available from sources other than the U.S. Environmental Protection Agency's Integrated Risk Information System (IRIS) or ambient water quality criteria documents. Such criteria, or the RfD, RSC, CPF, and BCF values used to compute criteria, shall not be effective until adopted following established rulemaking procedures.

Author: James E. McIndoe; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: March 2, 1990. **Amended:** April 3, 1991; May 28, 1992; August 29, 1994; May 30, 1997; September 7, 2000; January 12, 2001; January 14, 2005; September 21, 2005; May 29, 2007; May 27, 2008; November 25, 2008; April 1, 2014; February 3, 2017.

335-6-10-.08 <u>Waste Treatment Requirements</u>. The following treatment requirements apply to all industrial waste discharges, sewage treatment plants, and combined waste treatment plants:

As a minimum, secondary treatment, "equivalent to secondary (a) treatment", or alternate levels as provided for in rules and regulations promulgated by the U.S. Environmental Protection Agency at 40 CFR Part 133 (2013), shall be applied to all sanitary waste discharges. The term "secondary treatment" is applied to biologically degradable waste and is interpreted to mean a facility which at design flow is capable of removing substantially all floating and settleable solids and to achieve a minimum removal of 85 percent of both the 5day biochemical oxygen demand and suspended solids which, in the case of municipal wastes, is generally considered to produce an effluent quality containing a BOD_5 concentration of 30 mg/l and a suspended solids concentration of 30 mg/l. Equivalent to secondary treatment and alternate levels shall be defined by the U.S. Environmental Protection Agency at 40 CFR Part 133 (2013). Disinfection, where necessary, will also be required. Waste treatment requirements also include those established under the provisions of Sections 301, 304, 306, and 307 of the Federal Water Pollution Control Act (FWPCA). In addition, the Department may require secondary treatment of biologically degradable industrial wastewaters when the application of guidelines published

under federal law do not produce a similar reduction in the parameters of concern. In the application of this requirement, consideration will be given to efficiencies achieved through in-process improvements.

(b) In all cases, an analysis of water use and flow characteristics for the receiving stream shall be provided to determine the degree of treatment required. Where indicated by the analysis, a higher degree of treatment may be required.

(c) The minimum 7-day low flow that occurs once in 10 years shall be the basis for design criteria.

Author: James E. McIndoe; Lynn Sisk; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: May 5, 1967. **Amended:** June 19, 1967; July 17, 1972; February 26, 1973; May 30, 1977; December 19, 1977; February 4, 1981; March 2, 1990; April 3, 1991; January 14, 2005; April 1, 2014; February 3, 2017.

335-6-10-.09 Specific Water Quality Criteria.

(1) **OUTSTANDING ALABAMA WATER**

(a) Best usage of waters: activities consistent with the natural characteristics of the waters.

(b) Conditions related to best usage:

1. High quality waters that constitute an outstanding Alabama resource, such as waters of state parks and wildlife refuges and waters of exceptional recreational or ecological significance, may be considered for classification as an Outstanding Alabama Water (OAW).

(c) Specific criteria:

1. Sewage, industrial wastes, or other wastes:

(i) Existing point source discharges to an Outstanding Alabama Water shall be allowed; however, within three years of assignment of the OAW classification or at permit renewal, whichever is later, existing point sources shall be required to meet the effluent limitations specified for new point source discharges in subparagraph (ii) hereof.

(ii) New point source discharges or expansions of existing point source discharges shall not be allowed unless a thorough evaluation of all practicable treatment and disposal alternatives by the permit applicant has demonstrated to the satisfaction of the Department that there is no feasible alternative to discharge to the waters classified OAW. At a minimum, domestic wastewater discharges shall be required to meet monthly average effluent limitations of 15 mg/l biochemical oxygen demand (5-day), 3 mg/l ammonia nitrogen, and 6 mg/l

dissolved oxygen, and shall be required to provide disinfection of the effluent. Non-domestic wastewater discharges shall be required to provide a comparably stringent level of treatment as determined by the Department.

(iii) Effluent limitations for new point source discharges or expansions of existing point source discharges to waters upstream of, or tributary to, waters classified OAW shall be established by the Department such that the impact of the discharge within the waters classified OAW is no greater than if the discharge occurred at the OAW boundary at the treatment levels specified in subparagraph (ii) hereof.

(iv) All NPDES permits shall contain toxics limits that will ensure compliance with all applicable water quality standards. Such limits shall be acute and chronic toxicity limits for individual toxic substances, whole effluent toxicity limits, or both. For permittees subject to whole effluent toxicity limitations, both acute and chronic testing will be required. Whole effluent acute toxicity will be demonstrated if the effluent causes more than 10 percent mortality of test organisms when tested at an effluent concentration of 100 percent. For permittees whose discharge will result in an in-stream waste concentration of 10 percent or more, whole effluent chronic toxicity limits will be based on an instream concentration of 100 percent; for permittees whose discharge will result in an in-stream waste concentration of less than 10 percent, whole effluent chronic toxicity limits will be based on the in-stream waste concentration.

(v) Nonpoint source discharges shall use best management practices adequate to protect water quality consistent with the Department's nonpoint source control program.

(vi) All NPDES permits and nonpoint sources shall incorporate or employ water pollution prevention or waste reduction measures as established by the Department.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5. For salt waters and estuarine waters to which this classification is assigned, wastes as herein described shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.5, nor greater than 8.5.

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90 $^{\circ}$ F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been classified by the Alabama Department of Conservation and Natural Resources as supporting smallmouth bass, sauger, or walleye, shall not exceed 86 °F.

(iii) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 5 $^{\circ}$ F in streams, lakes, and reservoirs in non-coastal and non-estuarine areas.

(iv) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 4 $^{\circ}$ F in coastal or estuarine waters during the period October through May, nor shall the rise exceed 1.5 $^{\circ}$ F during the period June through September.

(v) In lakes and reservoirs there shall be no withdrawal from, nor discharge of heated waters to, the hypolimnion unless it can be shown that such discharge or withdrawal will be beneficial to water quality.

(vi) In all waters the normal daily and seasonal temperature variations that were present before the addition of artificial heat shall be maintained, and there shall be no thermal block to the migration of aquatic organisms.

(vii) Thermal permit limitations in NPDES permits may be less stringent than those required by subparagraphs (i) - (iv) hereof when a showing by the discharger has been made pursuant to Section 316 of the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. § 1251 <u>et seq</u>. or pursuant to a study of an equal or more stringent nature required by the State of Alabama authorized by Title 22, Section 22-22-9(c), <u>Code of Alabama</u> 1975, that such limitations will assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, in and on the body of water to which the discharge is made. Any such demonstration shall take into account the interaction of the thermal discharge component with other pollutants discharged.

4. Dissolved oxygen:

(i) For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5.5 mg/l at all times; except under extreme conditions due to natural causes, it may range between 5.5 mg/l and 4 mg/l, provided that the water quality is favorable in all other parameters. The normal seasonal and daily fluctuations shall be maintained above these levels. In no event shall the dissolved oxygen level be less than 4 mg/l due to hydroelectric turbine discharges from existing hydroelectric generation impoundments. All new hydroelectric generation impoundments, including addition of new hydroelectric generation units to existing impoundments, shall be designed so that the discharge will contain at least 5.5 mg/l dissolved oxygen where practicable and technologically possible. The Environmental Protection Agency, in cooperation with the State of Alabama and parties responsible for impoundments, shall develop a program to improve the design of existing facilities.

(ii) In coastal waters, surface dissolved oxygen concentrations shall not be less than 5.5 mg/l, except where natural phenomena cause the value to be depressed.

(iii) In estuaries and tidal tributaries, dissolved oxygen concentrations shall not be less than 5.5 mg/l, except in dystrophic waters or where natural conditions cause the value to be depressed.

(iv) In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

5. Toxic substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, as will not exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and aquatic life, including shrimp and crabs in estuarine or salt waters or the propagation thereof.

6. Taste, odor, and color-producing substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, as will not exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and aquatic life, including shrimp and crabs in estuarine and salt waters or adversely affect the propagation thereof; impair the palatability or marketability of fish and wildlife or shrimp and crabs in estuarine and salt waters; or unreasonably affect the aesthetic value of waters for any use under this classification.

7. Bacteria: in non-coastal waters, bacteria of the *E. coli* group shall not exceed a geometric mean of 126 colonies/100 ml nor exceed a maximum of 235 colonies/100 ml in any sample. In coastal waters, bacteria of the enterococci group shall not exceed a geometric mean of 35 colonies/100 ml nor exceed a maximum of 104 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours.

8. Radioactivity: the concentrations of radioactive materials present shall not exceed the requirements of the State Department of Public Health.

9. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

(2) **PUBLIC WATER SUPPLY**

(a) Best usage of waters: source of water supply for drinking or food-processing purposes.*

(b) Conditions related to best usage: the waters, if subjected to treatment approved by the Department equal to coagulation, sedimentation, filtration and disinfection, with additional treatment if necessary to remove naturally present impurities, and which meet the requirements of the Department, will be considered safe for drinking or food-processing purposes.

(c) Other usage of waters: it is recognized that the waters may be used for incidental water contact year-round and for whole body water-contact recreation during the months of May through October, except that water contact is strongly discouraged in the vicinity of discharges or other conditions beyond the control of the Department or the Alabama Department of Public Health.

(d) Conditions related to other usage: the waters, under proper sanitary supervision by the controlling health authorities, will meet accepted standards of water quality for outdoor swimming areas and will be considered satisfactory for swimming and other whole body water-contact sports.

(e) Specific criteria:

1. Sewage, industrial wastes, or other wastes: none which are not effectively treated or controlled in accordance with rule 335-6-10-.08.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5.

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90 $^{\circ}$ F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been designated by the Alabama Department of Conservation and Natural Resources as supporting smallmouth bass, sauger, or walleye, shall not exceed 86 °F.

^{*} **NOTE:** In determining the safety or suitability of waters for use as sources of water supply for drinking or food-processing purposes after approved treatment, the Commission will be guided by the physical and chemical standards specified by the Department.

(iii) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 5 $^{\circ}$ F in streams, lakes, and reservoirs in non-coastal and non-estuarine areas.

(iv) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 4 °F in coastal or estuarine waters during the period October through May, nor shall the rise exceed 1.5 °F during the period June through September.

(v) In lakes and reservoirs there shall be no withdrawal from, nor discharge of heated waters to, the hypolimnion unless it can be shown that such discharge or withdrawal will be beneficial to water quality.

(vi) In all waters the normal daily and seasonal temperature variations that were present before the addition of artificial heat shall be maintained, and there shall be no thermal block to the migration of aquatic organisms.

(vii) Thermal permit limitations in NPDES permits may be less stringent than those required by subparagraphs (i) - (iv) hereof when a showing by the discharger has been made pursuant to Section 316 of the Federal Water Pollution Control Act (FWPCA), 33 U.S.C.§ 1251 <u>et seq</u>. or pursuant to a study of an equal or more stringent nature required by the State of Alabama authorized by Title 22, Section 22-22-9(c), <u>Code of Alabama</u>, 1975, that such limitations will assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, in and on the body of water to which the discharge is made. Any such demonstration shall take into account the interaction of the thermal discharge component with other pollutants discharged.

4. Dissolved oxygen:

(i) For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times; except under extreme conditions due to natural causes, it may range between 5 mg/l and 4 mg/l, provided that the water quality is favorable in all other parameters. The normal seasonal and daily fluctuations shall be maintained above these levels. In no event shall the dissolved oxygen level be less than 4 mg/l due to discharges from existing hydroelectric generation impoundments. All new hydroelectric generation impoundments, including addition of new hydroelectric generation units to existing impoundments, shall be designed so that the discharge will contain at least 5 mg/l dissolved oxygen where practicable and technologically possible. The Environmental Protection Agency, in cooperation with the State of Alabama and parties responsible for impoundments, shall develop a program to improve the design of existing facilities.

(ii) In coastal waters, surface dissolved oxygen concentrations shall not be less than 5 mg/l, except where natural phenomena cause the value to be depressed.

(iii) In estuaries and tidal tributaries, dissolved oxygen concentrations shall not be less than 5 mg/l, except in dystrophic waters or where natural conditions cause the value to be depressed.

(iv) In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

5. Toxic substances; color producing; heated liquids; or other deleterious substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, and only such temperatures as will not render the waters unsafe or unsuitable as a source of water supply for drinking or food-processing purposes, or exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish, wildlife and aquatic life, or adversely affect the aesthetic value of waters for any use under this classification.

6. Taste and odor producing substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as will not cause taste and odor difficulties in water supplies which cannot be corrected by treatment as specified under subparagraph (b), or impair the palatability of fish.

7. Bacteria:

(i) In non-coastal waters, bacteria of the *E. coli* group shall not exceed a geometric mean of 548 colonies/100 ml; nor exceed a maximum of 2,507 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. In coastal waters, bacteria of the enterococci group shall not exceed a maximum of 275 colonies/100 ml in any sample.

For incidental water contact and whole body water-contact (ii) recreation during the months of May through October, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the geometric mean E. coli organism density does not exceed 126 colonies/100 ml nor exceed a maximum of 298 colonies/100 ml in any single sample in non-coastal waters. In coastal waters, bacteria of the enterococci group shall not exceed a geometric mean of 35 colonies/100 ml nor exceed a maximum of 158 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. When the geometric mean bacterial organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the waters. Waters in the immediate vicinity of discharges of sewage or other wastes likely to contain bacteria harmful to humans, regardless of the degree of

treatment afforded these wastes, are not acceptable for swimming or other whole body water-contact sports.

8. Radioactivity: no radionuclide or mixture of radionuclides shall be present at concentrations greater than those specified by the requirements of the State Department of Public Health.

9. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters, without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

(3) SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS

(a) Best usage of waters: swimming and other whole body water-contact sports.*

(b) Conditions related to best usage: the waters, under proper sanitary supervision by the controlling health authorities, will meet accepted standards of water quality for outdoor swimming areas and will be considered satisfactory for swimming and other whole body water-contact sports. The quality of waters will also be suitable for the propagation of fish, wildlife and aquatic life. The quality of salt waters and estuarine waters to which this classification is assigned will be suitable for the propagation and harvesting of shrimp and crabs.

(c) Specific criteria:

1. Sewage, industrial wastes, or other wastes: none which are not effectively treated or controlled in accordance with rule 335-6-10-.08.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5. For estuarine waters and salt waters to which this classification is assigned, wastes as described herein shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.5, nor greater than 8.5.

^{*} **NOTE**: In assigning this classification to waters intended for swimming and water-contact sports, the Commission will take into consideration the relative proximity of discharges of wastes and will recognize the potential hazards involved in locating swimming areas close to waste discharges. The Commission will not assign this classification to waters, the bacterial quality of which is dependent upon adequate disinfection of waste and where the interruption of such treatment would render the water unsafe for bathing.

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90 $^{\circ}$ F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been designated by the Alabama Department of Conservation and Natural Resources as supporting smallmouth bass, sauger, or walleye, shall not exceed 86 °F.

(iii) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 5 $^{\circ}$ F in streams, lakes, and reservoirs in non-coastal and non-estuarine areas.

(iv) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 4 $^{\circ}$ F in coastal or estuarine waters during the period October through May, nor shall the rise exceed 1.5 $^{\circ}$ F during the period June through September.

(v) In lakes and reservoirs there shall be no withdrawal from, nor discharge of heated waters to, the hypolimnion unless it can be shown that such discharge or withdrawal will be beneficial to water quality.

(vi) In all waters the normal daily and seasonal temperature variations that were present before the addition of artificial heat shall be maintained, and there shall be no thermal block to the migration of aquatic organisms.

(vii) Thermal permit limitations in NPDES permits may be less stringent than those required by subparagraphs (i) - (iv) hereof when a showing by the discharger has been made pursuant to Section 316 of the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. § 1251 <u>et seq</u>. or pursuant to a study of an equal or more stringent nature required by the State of Alabama authorized by Title 22, Section 22-22-9(c), <u>Code of Alabama</u>, 1975, that such limitations will assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, in and on the body of water to which the discharge is made. Any such demonstration shall take into account the interaction of the thermal discharge component with other pollutants discharged.

4. Dissolved oxygen:

(i) For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times; except under extreme conditions due to natural causes, it may range between 5 mg/l and 4 mg/l, provided that the water quality is favorable in all other parameters. The normal seasonal and daily fluctuations shall be maintained above these levels. In no event shall the dissolved oxygen level be less than 4 mg/l due to discharges from existing hydroelectric generation impoundments. All new

hydroelectric generation impoundments, including addition of new hydroelectric generation units to existing impoundments, shall be designed so that the discharge will contain at least 5 mg/l dissolved oxygen where practicable and technologically possible. The Environmental Protection Agency, in cooperation with the State of Alabama and parties responsible for impoundments, shall develop a program to improve the design of existing facilities.

(ii) In coastal waters, surface dissolved oxygen concentrations shall not be less than 5 mg/l, except where natural phenomena cause the value to be depressed.

(iii) In estuaries and tidal tributaries, dissolved oxygen concentrations shall not be less than 5 mg/l, except in dystrophic waters or where natural conditions cause the value to be depressed.

(iv) In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

5. Toxic substances; color producing substances; odor producing substances; or other deleterious substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as will not render the water unsafe or unsuitable for swimming and water-contact sports; exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish, wildlife, and aquatic life or, where applicable, shrimp and crabs; impair the palatability of fish, or where applicable, shrimp and crabs; impair the waters for any other usage established for this classification or unreasonably affect the aesthetic value of waters for any use under this classification.

6. Bacteria:

(i) Waters in the immediate vicinity of discharges of sewage or other wastes likely to contain bacteria harmful to humans, regardless of the degree of treatment afforded these wastes*, are not acceptable for swimming or other whole body water-contact sports.

(ii) In all other areas, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the geometric mean *E. coli* organism density does

^{*} **NOTE**: In assigning this classification to waters intended for swimming and water-contact sports, the Commission will take into consideration the relative proximity of discharges of wastes and will recognize the potential hazards involved in locating swimming areas close to waste discharges. The Commission will not assign this classification to waters, the bacterial quality of which is dependent upon adequate disinfection of waste and where the interruption of such treatment would render the water unsafe for bathing.

not exceed 126 colonies/100 ml nor exceed a maximum of 235 colonies/100 ml in any sample in non-coastal waters. In coastal waters, bacteria of the enterococci group shall not exceed a geometric mean of 35 colonies/100 ml nor exceed a maximum of 104 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. When the geometric mean bacterial organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the waters.

(iii) The policy of nondegradation of high quality waters shall be stringently applied to bacterial quality of recreational waters.

7. Radioactivity: the concentrations of radioactive materials present shall not exceed the requirement of the State Department of Public Health.

8. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters, without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

(4) SHELLFISH HARVESTING

(a) Best usage of waters: propagation and harvesting of shellfish for sale or use as a food product.

(b) Conditions related to best usage: waters will meet the sanitary and bacteriological standards included in the *National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish: 2015 Revision,* published by the Food and Drug Administration, U.S. Department of Health and Human Services and the requirements of the State Department of Public Health. The waters will also be of a quality suitable for the propagation of fish and other aquatic life, including shrimp and crabs. Only coastal waters may be considered for classification as Shellfish Harvesting.

(c) Other usage of waters: it is recognized that the waters may be used for incidental water contact year-round and for whole body water-contact recreation during the months of May through October, except that water contact is strongly discouraged in the vicinity of discharges or other conditions beyond the control of the Department or the Alabama Department of Public Health.

(d) Conditions related to other usage: the waters, under proper sanitary supervision by the controlling health authorities, will meet accepted standards of water quality for outdoor swimming areas and will be considered satisfactory for swimming and other whole body water-contact sports.

(e) Specific criteria:

1. Sewage, industrial wastes, or other wastes: none which are not effectively treated in accordance with rule 335-6-10-.08.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.5, nor greater than 8.5.

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90 $^{\circ}$ F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been designated by the Alabama Department of Conservation and Natural Resources as supporting smallmouth bass, sauger, or walleye, shall not exceed 86 °F.

(iii) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 5 $^{\circ}$ F in streams, lakes, and reservoirs in non-coastal and non-estuarine areas.

(iv) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 4 °F in coastal or estuarine waters during the period October through May, nor shall the rise exceed 1.5 °F during the period June through September.

(v) In lakes and reservoirs there shall be no withdrawal from, nor discharge of heated waters to, the hypolimnion unless it can be shown that such discharge or withdrawal will be beneficial to water quality.

(vi) In all waters the normal daily and seasonal temperature variations that were present before the addition of artificial heat shall be maintained, and there shall be no thermal block to the migration of aquatic organisms.

(vii) Thermal permit limitations in NPDES permits may be less stringent than those required by subparagraphs (i) - (iv) hereof when a showing by the discharger has been made pursuant to Section 316 of the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. § 1251 <u>et seq</u>. or pursuant to a study of an equal or more stringent nature required by the State of Alabama authorized by Title 22, Section 22-22-9(c), <u>Code of Alabama</u>, 1975, that such limitations will assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, in and on the body of water to which the discharge is made. Any such demonstration shall take into account the interaction of the thermal discharge component with other pollutants discharged.

4. Dissolved oxygen:

(i) For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times; except under extreme conditions due to natural causes, it may range between 5 mg/l and 4 mg/l, provided that the water quality is favorable in all other parameters. The normal seasonal and daily fluctuations shall be maintained above these levels. In no event shall the dissolved oxygen level be less than 4 mg/l due to discharges from existing hydroelectric generation impoundments. All new hydroelectric generation impoundments, including addition of new hydroelectric generation units to existing impoundments, shall be designed so that the discharge will contain at least 5 mg/l dissolved oxygen where practicable and technologically possible. The Environmental Protection Agency, in cooperation with the State of Alabama and parties responsible for impoundments, shall develop a program to improve the design of existing facilities.

(ii) In coastal waters, surface dissolved oxygen concentrations shall not be less than 5 mg/l, except where natural phenomena cause the value to be depressed.

(iii) In estuaries and tidal tributaries, dissolved oxygen concentrations shall not be less than 5 mg/l, except in dystrophic waters or where natural conditions cause the value to be depressed.

(iv) In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

5. Toxic substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, as will not exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and aquatic life, including shrimp and crabs; or affect the marketability of fish and shellfish, including shrimp and crabs.

6. Color, taste, and odor-producing substances and other deleterious substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, as will not exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and shellfish, including shrimp and crabs; adversely affect marketability or palatability of fish and shellfish, including shrimp and crabs; or unreasonably affect the aesthetic value of waters for any use under this classification.

7. Bacteria:

(i) Not to exceed the limits specified in the National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish: 2015 Revision, published by the Food and Drug Administration, U.S. Department of Health and Human Services. (ii) In coastal waters, bacteria of the enterococci group shall not exceed a maximum of 275 colonies/100 ml in any sample.

(iii) For incidental water contact and whole body water-contact recreation during the months of May through October, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the enterococci group does not exceed a geometric mean of 35 colonies/100 ml nor exceed a maximum of 104 colonies/100 ml in any sample in coastal waters. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. When the geometric mean bacterial organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the waters. Waters in the immediate vicinity of discharges of sewage or other wastes likely to contain bacteria harmful to humans, regardless of the degree of treatment afforded these wastes, are not acceptable for swimming or other whole body water-contact sports.

8. Radioactivity: the concentrations of radioactive materials present shall not exceed the requirements of the State Department of Public Health.

9. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

(5) **FISH AND WILDLIFE**

(a) Best usage of waters: fishing, propagation of fish, aquatic life, and wildlife.

(b) Conditions related to best usage: the waters will be suitable for fish, aquatic life and wildlife propagation. The quality of salt and estuarine waters to which this classification is assigned will also be suitable for the propagation of shrimp and crabs.

(c) Other usage of waters: it is recognized that the waters may be used for incidental water contact year-round and whole body water-contact recreation during the months of May through October, except that water contact is strongly discouraged in the vicinity of discharges or other conditions beyond the control of the Department or the Alabama Department of Public Health.

(d) Conditions related to other usage: the waters, under proper sanitary supervision by the controlling health authorities, will meet accepted standards of water quality for outdoor swimming areas and will be considered satisfactory for swimming and other whole body water-contact sports.

(e) Specific criteria:

1. Sewage, industrial wastes, or other wastes: none which are not effectively treated in accordance with rule 335-6-10-.08.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5. For salt waters and estuarine waters to which this classification is assigned, wastes as herein described shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.5, nor greater than 8.5.

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90° F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been designated by the Alabama Department of Conservation and Natural Resources as supporting smallmouth bass, sauger, or walleye, shall not exceed 86 °F.

(iii) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 5 $^{\circ}$ F in streams, lakes, and reservoirs in non-coastal and non-estuarine areas.

(iv) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 4 °F in coastal or estuarine waters during the period October through May, nor shall the rise exceed 1.5 °F during the period June through September.

(v) In lakes and reservoirs there shall be no withdrawal from, nor discharge of heated waters to, the hypolimnion unless it can be shown that such discharge or withdrawal will be beneficial to water quality.

(vi) In all waters the normal daily and seasonal temperature variations that were present before the addition of artificial heat shall be maintained, and there shall be no thermal block to the migration of aquatic organisms.

(vii) Thermal permit limitations in NPDES permits may be less stringent than those required by subparagraphs (i) - (iv) hereof when a showing by the discharger has been made pursuant to Section 316 of the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. § 1251 <u>et seq</u>. or pursuant to a study of an equal or more stringent nature required by the State of Alabama authorized by Title 22, Section 22-22-9(c), <u>Code of Alabama</u>, 1975, that such limitations will assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, in and on the body of water to which the discharge is made. Any such demonstration shall take into account the interaction of the thermal discharge component with other pollutants discharged.

4. Dissolved oxygen:

(i) For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times; except under extreme conditions due to natural causes, it may range between 5 mg/l and 4 mg/l, provided that the water quality is favorable in all other parameters. The normal seasonal and daily fluctuations shall be maintained above these levels. In no event shall the dissolved oxygen level be less than 4 mg/l due to discharges from existing hydroelectric generation impoundments. All new hydroelectric generation impoundments, including addition of new hydroelectric generation units to existing impoundments, shall be designed so that the discharge will contain at least 5 mg/l dissolved oxygen where practicable and technologically possible. The Environmental Protection Agency, in cooperation with the State of Alabama and parties responsible for impoundments, shall develop a program to improve the design of existing facilities.

(ii) In coastal waters, surface dissolved oxygen concentrations shall not be less than 5 mg/l, except where natural phenomena cause the value to be depressed.

(iii) In estuaries and tidal tributaries, dissolved oxygen concentrations shall not be less than 5 mg/l, except in dystrophic waters or where natural conditions cause the value to be depressed.

(iv) In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

5. Toxic substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, as will not exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and aquatic life, including shrimp and crabs in estuarine or salt waters or the propagation thereof.

6. Taste, odor, and color-producing substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances, as will not exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and aquatic life, including shrimp and crabs in estuarine and salt waters or adversely affect the propagation thereof; impair the palatability or marketability of fish and wildlife or shrimp and crabs in estuarine and salt waters; or unreasonably affect the aesthetic value of waters for any use under this classification.

7. Bacteria:

(i) In non-coastal waters, bacteria of the *E. coli* group shall not exceed a geometric mean of 548 colonies/100 ml; nor exceed a maximum of 2,507 colonies/100 ml in any sample. In coastal waters, bacteria of the enterococci group shall not exceed a maximum of 275 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours.

For incidental water contact and whole body water-contact (ii) recreation during the months of May through October, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the geometric mean E. coli organism density does not exceed 126 colonies/100 ml nor exceed a maximum of 298 colonies/100 ml in any sample in non-coastal waters. In coastal waters, bacteria of the enterococci group shall not exceed a geometric mean of 35 colonies/100 ml nor exceed a maximum of 158 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. When the geometric bacterial coliform organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the waters. Waters in the immediate vicinity of discharges of sewage or other wastes likely to contain bacteria harmful to humans, regardless of the degree of treatment afforded these wastes, are not acceptable for swimming or other whole body water-contact sports.

8. Radioactivity: the concentrations of radioactive materials present shall not exceed the requirements of the State Department of Public Health.

9. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

(6) **LIMITED WARMWATER FISHERY**

(a) The provisions of the Fish and Wildlife water use classification at rule 335-6-10-.09(5) shall apply to the Limited Warmwater Fishery water use classification, except as noted below. Unless alternative criteria for a given parameter are provided in paragraph (e) below, the applicable Fish and Wildlife criteria at paragraph 10-.09(5)(e) shall apply year-round. At the time the Department proposes to assign the Limited Warmwater Fishery classification to a specific waterbody, the Department may apply criteria from other classifications within this chapter if necessary to protect a documented, legitimate existing use.

(b) Best usage of waters (May through November): agricultural irrigation, livestock watering, industrial cooling and process water supplies, and any other usage, except fishing, bathing, recreational activities, including water-

contact sports, or as a source of water supply for drinking or food-processing purposes.

(c) Conditions related to best usage (May through November):

1. The waters will be suitable for agricultural irrigation, livestock watering, and industrial cooling waters. The waters will be usable after special treatment, as may be needed under each particular circumstance, for industrial process water supplies. The waters will also be suitable for other uses for which waters of lower quality will be satisfactory.

2. This category includes watercourses in which natural flow is intermittent, or under certain conditions non-existent, and which may receive treated wastes from existing municipalities and industries. In such instances, recognition is given to the lack of opportunity for mixture of the treated wastes with the receiving stream for purposes of compliance. It is also understood in considering waters for this classification that urban runoff or natural conditions may impact any waters so classified.

- (d) Other usage of waters: none recognized.
- (e) Specific criteria:

1. Dissolved oxygen (May through November): treated sewage, industrial wastes, or other wastes shall not cause the dissolved oxygen to be less than 3.0 mg/l. In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

2. Toxic substances and taste-, odor-, and color-producing substances attributable to treated sewage, industrial wastes, and other wastes: only such amounts as will not render the waters unsuitable for agricultural irrigation, livestock watering, industrial cooling, and industrial process water supply purposes; interfere with downstream water uses; or exhibit acute toxicity or chronic toxicity, as demonstrated by effluent toxicity testing or by application of numeric criteria given in rule 335-6-10-.07, to fish and aquatic life, including shrimp and crabs in estuarine or salt waters or the propagation thereof. For the purpose of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 2 years ($7Q_2$) shall be the basis for applying the chronic aquatic life criteria. The use of the $7Q_2$ low flow for application of chronic criteria is appropriate based on the historical uses and/or flow characteristics of streams to be considered for this classification.

3. Bacteria: In non-coastal waters, bacteria of the *E. coli* group shall not exceed a geometric mean of 548 colonies/100 ml; nor exceed a maximum of 2,507 colonies/100 ml in any sample. In coastal waters, bacteria of the enterococci group shall not exceed a maximum of 275 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples

collected at a given station over a 30-day period at intervals not less than 24 hours.

(7) AGRICULTURAL AND INDUSTRIAL WATER SUPPLY

(a) Best usage of waters: agricultural irrigation, livestock watering, industrial cooling and process water supplies, and any other usage, except fishing, bathing, recreational activities, including water-contact sports, or as a source of water supply for drinking or food-processing purposes.

(b) Conditions related to best usage:

(i) The waters, except for natural impurities which may be present therein, will be suitable for agricultural irrigation, livestock watering, industrial cooling waters, and fish survival. The waters will be usable after special treatment, as may be needed under each particular circumstance, for industrial process water supplies. The waters will also be suitable for other uses for which waters of lower quality will be satisfactory.

(ii) This category includes watercourses in which natural flow is intermittent and non-existent during droughts and which may, of necessity, receive treated wastes from existing municipalities and industries, both now and in the future. In such instances, recognition must be given to the lack of opportunity for mixture of the treated wastes with the receiving stream for purposes of compliance. It is also understood in considering waters for this classification that urban runoff or natural conditions may impact any waters so classified.

(c) Specific criteria:

1. Sewage, industrial wastes, or other wastes: none which are not effectively treated or controlled in accordance with rule 335-6-10-.08.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5. For salt waters and estuarine waters to which this classification is assigned, wastes as herein described shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.5, nor greater than 8.5.

3. Temperature: the maximum temperature rise above natural temperatures due to the addition of artificial heat shall not exceed 5 $^{\circ}$ F in streams, lakes, and reservoirs, nor shall the maximum water temperature exceed 90 $^{\circ}$ F.

4. Dissolved oxygen: sewage, industrial wastes, or other wastes shall not cause the dissolved oxygen to be less than 3.0 mg/l. In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

5. Color, odor, and taste-producing substances, toxic substances, and other deleterious substances, including chemical compounds attributable to sewage, industrial wastes, and other wastes: only such amounts as will not render the waters unsuitable for agricultural irrigation, livestock watering, industrial cooling, industrial process water supply purposes, and fish survival, nor interfere with downstream water uses. For the purpose of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 10 years ($7Q_{10}$) shall be the basis for applying the acute aquatic life criteria. The use of the $7Q_{10}$ low flow for application of acute criteria is appropriate based on the historical uses and/or flow characteristics of streams to be considered for this classification.

6. Bacteria: In non-coastal waters, bacteria of the E. coli group shall not exceed a geometric mean of 700 colonies/100 ml; nor exceed a maximum of 3,200 colonies/100 ml in any sample. In coastal waters, bacteria of the enterococci group shall not exceed a maximum of 500 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours.

7. Radioactivity: the concentrations of radioactive materials present shall not exceed the requirements of the State Department of Public Health.

8. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

Author: James E. McIndoe; Lynn Sisk; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: May 5, 1967. **Amended:** June 19, 1967; July 17, 1972; February 26, 1973; May 30, 1977; December 19, 1977; February 4, 1981; March 2, 1990; April 3, 1991; December 30, 1992; September 7, 2000; May 27, 2004; January 14, 2005; January 19, 2010; January 18, 2011; April 1, 2014; February 3, 2017.

335-6-10-.10 Special Designations.

(1) **OUTSTANDING NATIONAL RESOURCE WATER**

(a) Designation:

1. High quality waters that constitute an outstanding National resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, may be considered

for designation as an Outstanding National Resource Water (ONRW). For waters designated as ONRW, existing water quality shall be maintained and protected.

(b) Specific Criteria:

1. Sewage, industrial wastes or other wastes:

(i) No new point source discharges or expansions of existing point source discharges to Outstanding National Resource Waters shall be allowed.

(ii) Existing point source discharges to the Outstanding National Resource Water shall be allowed provided they are treated or controlled in accordance with applicable laws and regulations.

(iii) New point source discharges or expansions of existing point source discharges to waters upstream of, or tributary to, Outstanding National Resource Waters 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, Outstanding National Resource Waters shall be allowed if such discharge would not maintain and protect water quality within the Outstanding National Resource Water.

(iv) Nonpoint source discharges shall use best management practices adequate to protect water quality consistent with the Department's nonpoint source control program.

(2) TREASURED ALABAMA LAKE

(a) Designation:

1. High quality waters within impoundments and natural lakes that constitute an exceptional resource, such as waters of state parks and wildlife refuges and waters of exceptional whole body water-contact recreation, water supply or rare and extraordinary ecological significance, may be considered for designation as a Treasured Alabama Lake (TAL); provided that such waters are fully supporting their classified uses at the time of the TAL designation. For waters designated as TAL, existing water quality shall be maintained and protected pursuant to the State's Antidegradation Policy and Implementation Procedures in rules 335-6-10-.04 and 335-6-10-.12.

- (b) Specific Criteria:
- 1. Sewage, industrial wastes or other wastes:
- (i) Existing point source discharges to a TAL shall be allowed.

(ii) New point source discharges or expansions of existing point source discharges shall not be allowed unless a thorough evaluation of all practicable treatment and disposal alternatives by the permit applicant has demonstrated to

the satisfaction of the Department that there is no feasible alternative to discharge to the waters designated TAL. Continuous point source wastewater discharges shall be required to meet water quality based effluent limitations necessary to protect the designated uses of the waters, and shall provide disinfection of the effluent to achieve bacteria levels consistent with the swimming use when the discharge contains domestic sewage. New major continuous point source wastewater discharges or expansions of existing major continuous point source wastewater discharges shall, at a minimum, be required to meet a monthly average effluent limitation of 1.0 mg/l total phosphorus. Stormwater discharges subject to the Department's NPDES regulations shall employ best management practices adequate to protect water quality. Applications for construction stormwater permits shall include a Construction Best Management Practices Plan (CBMPP).

(iii) Nonpoint source discharges shall use best management practices adequate to protect water quality consistent with the Department's nonpoint source control program.

Author: James E. McIndoe; Lynn Sisk. Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: April 3, 1991. Amended: May 23, 2011.

335-6-10-.11 Water Quality Criteria Applicable to Specific Lakes.

(1) For certain lakes and reservoirs, waterbody-specific criteria are appropriate to enhance nutrient management. The response to nutrient input may vary significantly lake-to-lake, and for a given lake year-to-year, depending on a number of factors such as rainfall distribution and hydraulic retention time. For this reason, lake nutrient quality targets necessary to maintain and protect existing uses, expressed as chlorophyll \underline{a} criteria, may also vary lake-to-lake. Because the relationship between nutrient input and lake chlorophyll \underline{a} levels is not always well-understood, it may be necessary to revise the criteria as additional water quality data and improved assessment tools become available.

(2) The following lake-specific criteria apply to the waters listed below, in addition to any other applicable criteria commensurate with the designated usage of such waters.

(a) **The Alabama River Basin**

1. Claiborne Lake: those waters impounded by Claiborne Lock and Dam on the Alabama River. The lake has a surface area of 5,930 acres at full pool.

(i) Chlorophyll \underline{a} (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll \underline{a} samples collected monthly April through

October shall not exceed 15 μ g/l, as measured at the deepest point, main river channel, dam forebay.

2. Dannelly Lake: those waters impounded by Millers Ferry Lock and Dam on the Alabama River. The lake has a surface area of 17,200 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 17 μ g/l, as measured at the deepest point, main river channel, dam forebay.

(b) **The Black Warrior River Basin**

1. Warrior Lake: those waters impounded by Warrior Lock and Dam on the Black Warrior River. The lake has a surface area of 7,800 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 12 µg/l, as measured at the deepest point, main river channel, dam forebay.

2. Oliver Lake: those waters impounded by William Bacon Oliver Lock and Dam on the Black Warrior River. The lake has a surface area of 800 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 12 µg/l, as measured at the deepest point, main river channel, dam forebay.

3. Holt Lake: those waters impounded by Holt Lock and Dam on the Black Warrior River. The lake has a surface area of 3,200 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 16 μ g/l, as measured at the deepest point, main river channel, dam forebay.

4. Lake Tuscaloosa: those waters impounded by Lake Tuscaloosa Dam on the North River. The lake has a surface area of 5,885 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in Standard Methods for the Examination of Water and Wastewater, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through

October shall not exceed 8 μ g/l, as measured at the deepest point, main river channel, dam forebay.

5. Bankhead Lake: those waters impounded by John Hollis Bankhead Lock and Dam on the Black Warrior River. The lake has a surface area of 9,200 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in Standard Methods for the Examination of Water and Wastewater, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 16 µg/l, as measured at the deepest point, main river channel, dam forebay.

6. Smith Lake: those waters impounded by Lewis M. Smith Dam on the Sipsey Fork River. The lake has a surface area of 21,200 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 5 μ g/l, as measured at the deepest point, main river channel, dam forebay; 5 μ g/l, as measured at the deepest point, main river channel, at Duncan Creek/Sipsey River confluence (downstream of the Alabama Highway 257 bridge); and 5 μ g/l, as measured at the deepest point, main river channel, immediately downstream of Brushy Creek confluence.

7. Inland Lake: those waters impounded by Inland Lake Dam on the Blackburn Fork of the Little Warrior River. The lake has a surface area of 1,095 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in Standard Methods for the Examination of Water and Wastewater, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 6 μ g/l, as measured at the deepest point, main river channel, dam forebay.

(c) **The Cahaba River Basin**

1. Lake Purdy: those waters impounded by Lake Purdy Dam at the headwaters of the Cahaba River. The lake has a surface area of 1,050 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 16 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 18 μ g/l, as measured at the deepest point, main river channel, immediately upstream of the Irondale Bridge.

(d) The Chattahoochee River Basin

1. Walter F. George Lake: those waters impounded by Walter F. George Lock and Dam on the Chattahoochee River. The lake has a surface area of 45,181 acres at full power pool, 18,672 acres of which are within Alabama. The Alabama-Georgia state line is represented by the west bank of the original river channel, and the points of measurement for the criteria given below are located in Georgia waters.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 15 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 18 μ g/l, as measured at the deepest point, main river channel, approximately 0.25 miles upstream of U.S. Highway 82.

2. Lake Harding: those waters impounded by Bartletts Ferry Dam on the Chattahoochee River. The lake has a surface area of 5850 acres at full pool, 2,176 acres of which are within Alabama. The point of measurement for the criterion given below is located in Georgia waters.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 15 µg/l, as measured at the deepest point, main river channel, dam forebay.

3. West Point Lake: those waters impounded by West Point Dam on the Chattahoochee River. The lake has a surface area of 25,864 acres at full power pool, 2,765 acres of which are within Alabama. The point of measurement for the criterion given below is located in Georgia waters.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 22 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 24 μ g/l, as measured at the LaGrange Water Intake.

(e) **The Coosa River Basin**

1. Weiss Lake: those waters impounded by Weiss Dam on the Coosa River. The lake has a surface area of 30,200 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 20 μ g/l, as measured at the deepest point, main river channel, power dam forebay; or 20 μ g/l, as measured at the deepest point, main river channel, immediately upstream of causeway (Alabama Highway 9) at Cedar Bluff. If the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October is significantly less than 20 μ g/l for a given year, the Department will re-evaluate the chlorophyll <u>a</u> criteria, associated nutrient
management strategies, and available data and information, and recommend changes, if appropriate, to maintain and protect existing uses.

2. Neely Henry Lake: those waters impounded by Neely Henry Dam on the Coosa River. The lake has a surface area of 11,235 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 18 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 18 μ g/l, as measured at the deepest point, main river channel, immediately upstream of Alabama Highway 77 bridge.

3. Logan Martin Lake: those waters impounded by Logan Martin Dam on the Coosa River. The lake has a surface area of 15,263 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 17 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 17 μ g/l, as measured at the deepest point, main river channel, approximately 1.5 miles downstream of Alabama Highway 34 bridge.

4. Lay Lake: those waters impounded by Lay Dam on the Coosa River. The lake has a surface area of 12,000 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 17 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 17 μ g/l, as measured at the deepest point, main river channel, immediately downstream of Peckerwood Creek/Coosa River confluence.

5. Mitchell Lake: those waters impounded by Mitchell Dam on the Coosa River. The lake has a surface area of 5,850 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 14 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 16 μ g/l, as measured at the deepest point, main river channel, downstream of Foshee Islands.

6. Jordan Lake: those waters impounded by Jordan Dam on the Coosa River. The lake has a surface area of 6,800 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through

October shall not exceed 14 μ g/l, as measured at the deepest point, main river channel, dam forebay.

(f) The Escambia River Basin

1. Point A Lake: those waters impounded by Point A Dam on the Conecuh River. The lake has a surface area of 900 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 9 µg/l, as measured at the deepest point, main river channel, dam forebay.

2. Gantt Lake: those waters impounded by Gantt Dam on the Conecuh River. The lake has a surface area of 2,767 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 11 µg/l, as measured at the deepest point, main river channel, dam forebay.

(g) **The Escatawpa River Basin**

1. Big Creek Lake (J.B. Converse Lake): those waters impounded on Big Creek. The lake is a tributary-storage reservoir and has a surface area of 3,600 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 11 μ g/l, as measured at the deepest point, main river channel, dam forebay.

(h) **The Tallapoosa River Basin**

1. Thurlow Lake: those waters impounded by Thurlow Dam on the Tallapoosa River. The reservoir has a surface area of 574 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 5 µg/l, as measured at the deepest point, main river channel, dam forebay.

2. Yates Lake: those waters impounded by Yates Dam on the Tallapoosa River. The lake has a surface area of 2,000 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the

photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 5 μ g/l, as measured at the deepest point, main river channel, dam forebay.

3. Lake Martin: those waters impounded by Martin Dam on the Tallapoosa River. The lake has a surface area of 40,000 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 5 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 5 μ g/l, as measured at the deepest point main river channel, immediately upstream of Blue Creek embayment; or 5 μ g/l as measured at the deepest point, main river channel, immediately upstream of Blue Creek embayment; or 5 μ g/l as measured at the deepest point, main creek channel, immediately upstream of Alabama Highway 63 (Kowaliga) bridge.

4. R.L. Harris Lake: those waters impounded by R.L. Harris Dam on the Tallapoosa River. The lake has a surface area of 10,660 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photiczone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 10 μ g/l, as measured at the deepest point, main river channel, dam forebay; or 12 μ g/l, as measured at the deepest point, main river channel, immediately upstream of the Tallapoosa River - Little Tallapoosa River confluence.

(i) **The Tennessee River Basin**

1. Pickwick Lake: those waters impounded by Pickwick Dam on the Tennessee River. The reservoir has a surface area of 43,100 acres at full pool, 33,700 acres of which are within Alabama. The point of measurement for the criterion given below is located in Tennessee waters.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through September shall not exceed 18 μ g/l, as measured at the deepest point, main river channel, dam forebay.

2. Wilson Lake: those waters impounded by Wilson Dam on the Tennessee River. The lake has a surface area of 15,930 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through September shall not exceed 18 μ g/l, as measured at the deepest point, main river channel, dam forebay.

3. Wheeler Lake: those waters impounded by Wheeler Dam on the Tennessee River. The lake has a surface area of 67,100 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through September shall not exceed 18 μ g/l, as measured at the deepest point, main river channel, dam forebay.

4. Guntersville Lake: those waters impounded by Guntersville Dam on the Tennessee River. The lake has a surface area of 69,700 acres at full pool, 67,900 of which are within Alabama.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through September shall not exceed 18 μ g/l, as measured at the deepest point, main river channel, dam forebay.

5. Cedar Creek Lake: those waters impounded by Cedar Creek Dam on Cedar Creek. The reservoir has a surface area of 4,200 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} *Edition*, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 8 µg/l, as measured at the deepest point, main creek channel, dam forebay.

6. Little Bear Creek Lake: those waters impounded by Little Bear Dam on Little Bear Creek. The reservoir has a surface area of 1,600 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 8 µg/l, as measured at the deepest point, main creek channel, dam forebay.

7. Bear Creek Lake: those waters impounded by Bear Creek Dam on Bear Creek. The reservoir has a surface area of 670 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 16 µg/l, as measured at the deepest point, main creek channel, dam forebay.

8. Upper Bear Creek Lake: those waters impounded by Upper Bear Creek Dam on Upper Bear Creek. The reservoir has a surface area of 1,850 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater*, 20^{th} Edition, 1998): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 16 µg/l, as measured at the deepest point, main creek channel, dam forebay.

(j) The Tombigbee River Basin

1. Coffeeville Lake: those waters impounded by Coffeeville Dam on the Tombigbee River. The lake has a surface area of 8,500 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 10 μ g/l, as measured at the deepest point, main river channel, upstream of the lock canal.

2. Demopolis Lake: those waters impounded by Demopolis Dam downstream of the confluence of the Tombigbee and the Black Warrior Rivers. The lake has a surface area of 10,000 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 10 μ g/l, as measured at the deepest point, main river channel, dam forebay.

3. Gainesville Lake: those waters impounded by Gainesville Dam on the Tombigbee River. The lake has a surface area of 6,400 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition,* 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 14 μ g/l, as measured at the deepest point, main river channel, dam forebay.

4. Aliceville Lake: those waters impounded by Tom Bevill Dam on the Tombigbee River. The lake has a surface area of 8,300 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998): the mean of photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 18 μ g/l, as measured at the deepest point, main river channel, dam forebay.

(k) The Yellow River Basin

1. Lake Jackson: This natural lake, located in Florala, Alabama, has a surface area of 256 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 7 μ g/l, as measured at mid-lake.

2. Lake Frank Jackson: those waters impounded on Lightwood Knot Creek. The lake has a surface area of 1,000 acres at full pool.

(i) Chlorophyll <u>a</u> (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998*): the mean of the photic-zone composite chlorophyll <u>a</u> samples collected monthly April through October shall not exceed 12 μ g/l, as measured at the deepest point, main creek channel, dam forebay.

Author: James E. McIndoe; Lynn Sisk; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: January 12, 2001. **Amended:** May 16, 2002; May 27, 2004; September 21, 2005; January 18, 2011; April 1, 2014; February 3, 2017.

335-6-10-.12 Implementation of the Antidegradation Policy.

(1) The antidegradation policy at rule 335-6-10-.04 addresses three categories of waters/uses:

(a) High quality waters that constitute an outstanding national resource (Tier 3);

(b) Waters where the quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (Tier 2); and

(c) Existing instream water uses and the level of water quality necessary to protect the existing uses (Tier 1).

(2) Tier 3 waters are those waters designated pursuant to the Outstanding National Resource Water (ONRW) special designation at rule 335-6-10-.10, and are identified in rule 335-6-11-.02.

(3) Tier 1 waters are:

(a) Those waters (except waters assigned the use classification of Outstanding Alabama Water, which are Tier 2 waters) identified as Category 4 or Category 5 waters;

(b) Those waters (except waters assigned the use classification of Outstanding Alabama Water, which are Tier 2 waters) for which attainment of applicable water quality standards has been, or is expected to be, achieved through implementation of effluent limitations more stringent than technology-based controls (BPT, BAT, and secondary treatment); and

(c) Those waters assigned the use classification of Limited Warmwater Fishery or Agricultural and Industrial Water Supply (as identified in rule 335-6-11-.02).

(4) Tier 2 waters are all other waters (those waters not identified as either Tier 3 waters or Tier 1 waters), including all waters assigned the use classification of Outstanding Alabama Water (as identified in rule 335-6-11-.02).

(5) All new or expanded discharges to Tier 2 waters (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are potentially subject to the provisions of rule 335-6-10-.04(3). Applicants for such discharges are required to demonstrate that the proposed discharge is necessary for important economic or social development as a part of the permit application process.

(6) After receipt of a permit application for a potentially covered discharge, the Department will determine whether the proposed discharge is to a Tier 2 water, as defined in paragraph (4) above. Of necessity, this determination will be made on a case-by-case basis.

(7) The basic framework of the permitting process is unchanged for a covered discharge to a Tier 2 water. However, the process is enhanced to document the consideration of Tier 2 provisions. The additional documentation includes:

(a) The Department's determination that the application is for a new or expanded discharge;

(b) The Department's determination that the receiving stream is considered to be a Tier 2 water; and

(c) The Department's determination, based on the applicant's demonstration, that the proposed discharge is necessary for important economic or social development in the area in which the waters are located.

(8) All three items will be documented in the permit file and/or fact sheet, and will be used by the Department in its decision process. The public notice process will be used to announce a preliminary Department decision to deny or to allow a covered discharge to a Tier 2 water, while the final determination will be made concurrently with the final Department decision regarding the permit application for a covered discharge.

(9) Documentation by the applicant shall include:

(a) An evaluation of discharge alternatives completed by a Registered Professional Engineer licensed to practice in the State of Alabama.

1. The applicant shall document the discharge alternatives evaluation by completing and submitting the following forms¹, or by submitting the same information in another format acceptable to the Department:

(i) ADEM Form 311, Alternatives Analysis; and, as applicable,

(ii) ADEM Form 312, Calculation of Total Annualized Costs for Public-Sector Projects, or ADEM Form 313, Calculation of Total Annualized Costs for Private-Sector Projects. Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

(b) A demonstration that the proposed discharge will support important economic or social development in the area in which the waters are located, documented by the applicant's response, in writing, to the following questions. The applicant shall provide supporting information for each response.

1. What environmental or public health problem will the discharger be correcting?

2. How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?

3. How much reduction in employment will the discharger be avoiding?

4. How much additional state or local taxes will the discharger be paying?

5. What public service to the community will the discharger be providing?

6. What economic or social benefit will the discharger be providing to the community?

Author: James E. McIndoe; Lynn Sisk; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: August 1, 2002. Amended: January 18, 2011; February 3, 2017.

¹ Forms are listed in ADEM Admin. Code r. 335-1-1-.07 and are available for downloading on the ADEM web page under Forms.

	TOXI	TABLE IC POLLUTAN	1 T CRITERI	A			
	Aquatic Life Criteria Human Health Criteria						
	(in µ	g/l unless othe	rwise noted	l)	(in µg/l unless ot	herwise noted)	
Pollutant	Freshwater	Freshwater	Marine	Marine	Consumption of	Consumption	
	Acute	Chronic	Acute	Chronic	Water and Fish	of Fish Only	
Acenaphthene					Eq. 16	Eq. 17	
Acrolein					Eq. 16	Eq. 17	
Acrylonitrile ¹					Eq. 18	Eq. 19	
Aldrin ¹	3.0		1.3		Eq. 18	Eq. 19	
Anthracene					Eq. 16	Eq. 17	
Antimony					Eq. 16	Eq. 17	
Arsenic ¹ (trivalent)	340	150	69	36	Eq. 18	Eq. 19	
(Risk level = $1 \ge 10^{-5}$)							
Asbestos					7,000,000 fibe	ers/1 (MCL)	
D					D 10	5 10	
Benzene ¹					Eq. 18	Eq. 19	
Benzidine ¹					Eq. 18	Eq. 19	
Benzo(a)anthracene ¹					Eq. 18	Eq. 19	
Benzo(a)pyrene ¹					Eq. 18	Eq. 19	
Benzo(b)fluoranthene ¹					Eq. 18	Eq. 19	
Benzo(k)fluoranthene ¹					Eq. 18	Eq. 19	
Bis(2-chloroethyl)ether 1					Eq. 18	Eq. 19	
Bis(2-chloroisopropyl)ether					Eq. 16	Eq. 17	
					E . 10	E- 10	
Bis(2-ethylnexyl)phthalate					Eq. 18	Eq. 19	

	тох	TABLE	1 T CRITER	IA				
Aquatic Life Criteria Human Health Criteria								
	(in µ	ug/l unless othe	rwise noted	1)	(in µg/l unless ot	herwise noted)		
Pollutant	Freshwater	Freshwater	Marine	Marine	Consumption of	Consumption		
	Acute	Chronic	Acute	Chronic	Water and Fish	of Fish Only		
Bromoform ¹					Eq. 18	Eq. 19		
Butylbenzyl phthalate					Eq. 16	Eq. 17		
Cadmium	Eq. 1	Eq. 2	40	8.8				
Carbon tetrachloride 1					Eq. 18	Eq. 19		
Chlordane ¹	2.4	0.0043	0.09	0.004	Eq. 18	Eq. 19		
Chlorobenzene					Eq. 16	Eq. 17		
Chlorodibromomethane 1					Eq. 18	Eq. 19		
Chloroform ¹					Eq. 18	Eq. 19		
2-Chloronaphthalene					Eq. 16	Eq. 17		
2-Chlorophenol					Eq. 16	Eq. 17		
Chromium (trivalent)	Eq. 3	Eg. 4			1	1		
Chromium (hexavalent)	16	11	1100	50				
Chrysene ¹					Eq. 18	Eg. 19		
Copper	Ea. 5	Еа. б	4.8	3.1	1300 (MCL)	1		
Cyanide (free)	22	5.2	1.0	1.0	Eq. 16	Eq. 17		
4.4'-DDD ¹					Ea. 18	Ea. 19		
4.4'-DDE ¹					Eq. 18	Ea. 19		
4.4'-DDT ¹	1.1	0.001	0.13	0.001	Eq. 18	Eq. 19		
Dibenzo(a,h)anthracene ¹					Eq. 18	Ea. 19		

	TOX	TABLE IC POLLUTAN	1 T CRITER	IA			
Aquatic Life Criteria Human Health Criteria							
	(in µ	g/l unless othe	erwise noted	d)	(in µg/1 unless ot	herwise noted)	
Pollutant	Freshwater	Freshwater	Marine	Marine	Consumption of	Consumption	
	Acute	Chronic	Acute	Chronic	Water and Fish	of Fish Only	
1,2-Dichlorobenzene					Eq. 16	Eq. 17	
1,3-Dichlorobenzene					Eq. 16	Eq. 17	
1,4-Dichlorobenzene					Eq. 16	Eq. 17	
3,3'-Dichlorobenzidine ¹					Eq. 18	Eq. 19	
Dichlorobromomethane ¹					Eq. 18	Eq. 19	
1,2-Dichloroethane ¹					Eq. 18	Eq. 19	
1,1-Dichloroethylene					Eq. 16	Eq. 17	
2.4-Dichlorophenol					Ea. 16	Ea. 17	
, 1					1	1	
1.2 Dichloropropane ¹					Ea. 18	Ea. 19	
1.3 Dichloropropylene ¹					Ea. 18	Ea. 19	
Dieldrin ¹	0.24	0.056	0.71	0.0019	Eq. 18	Eq. 19	
	0.2	01000	0111	0.0019	24.10	24.12	
2,4-Dimethylphenol					Eq. 16	Eq. 17	
Diethyl phthalate					Eq. 16	Eq. 17	
Dimethyl phthalate					Eq. 16	Eq. 17	
Di-n-butyl phthalate					Eq. 16	Eq. 17	
4.6-Dinitro-2-methylphenol					Eq. 16	Eq. 17	
,					-1	.T .	
2,4 Dinitrotoluene ¹					Eq. 18	Eq. 19	
2,4-Dinitrophenol					Eq. 16	Eq. 17	

		TABLE	1						
TOXIC POLLUTANT CRITERIA									
	Aquatic Life Criteria Human Health Criteria								
	(in µ	g/l unless othe	rwise noted	l)	(in µg/l unless ot	herwise noted)			
Pollutant	Freshwater	Freshwater	Marine	Marine	Consumption of	Consumption			
	Acute	Chronic	Acute	Chronic	Water and Fish	of Fish Only			
Dioxin (2,3,7,8-TCDD) 1					Eq. 18	Eq. 19			
1,2-Diphenylhydrazine ¹					Eq. 18	Eq. 19			
Endosulfan (alpha)	0.22	0.056	0.034	0.0087	Eq. 16	Eq. 17			
Endosulfan (beta)	0.22	0.056	0.034	0.0087	Eq. 16	Eq. 17			
Endosulfan sulfate					Eq. 16	Eq. 17			
Endrin	0.086	0.036	0.037	0.0023	Eq. 16	Eq. 17			
Endrin aldehyde					Eq. 16	Eq. 17			
Ethylbenzene					Eq. 16	Eq. 17			
Fluoranthene					Eq. 16	Eq. 17			
Fluorene					Eq. 16	Eq. 17			
Heptachlor ¹	0.52	0.0038	0.053	0.0036	Eq. 18	Eq. 19			
Heptachlor epoxide ¹	0.52	0.0038	0.053	0.0036	Eq. 18	Eq. 19			
Hexachlorobenzene ¹					Eq. 18	Eq. 19			
Hexachlorobutadiene ¹					Eq. 18	Eq. 19			
					-	-			
Hexachlorocyclohexane (alpha) ¹					Eq. 18	Eq. 19			
Hexachlorocyclohexane (beta) ¹					Eq. 18	Eq. 19			
Hexachlorocyclohexane (gamma)	0.95		0.16		Eq. 16	Eq. 17			
Hexachlorocyclopentadiene					Eq. 16	Eq. 17			
Hexachloroethane ¹					Eq. 18	Eq. 19			
Hexachloroethane ¹					Eq. 18	Eq. 19			

	ΤΟΧ	TABLE	1 T CRITER	TA			
Aquatic Life Criteria Human Health Criteria							
	(in µ	g/l unless othe	erwise noted	d)	(in µg/l unless ot	herwise noted)	
Pollutant	Freshwater	Freshwater	Marine	Marine	Consumption of	Consumption	
	Acute	Chronic	Acute	Chronic	Water and Fish	of Fish Only	
Indeno (1,2,3-cd) pyrene ¹					Eq. 18	Eq. 19	
Isophorone ¹					Eq. 18	Eq. 19	
Lead	Eq. 7	Eq. 8	210	8.1			
Mercury (total recoverable)	2.4	0.012	2.1	0.025	Fa 16	Fg 17	
Mothyl bromido	2.7	0.012	4.1	0.025	Eq. 10 Eq. 16	Eq. 17	
Methylono oblorido 1					Eq. 10 \mathbf{E}_{q} 19	Eq. 17	
Nielrol		$\mathbf{F} \sim 10$	74	8.0	Eq. 10	Eq. 19 Eq. 17	
NICKEI	Eq. 9	Eq. 10	74	0.2	Eq. 10	Eq. 17	
Nitrobenzene					Eq. 16	Eq. 17	
N-Nitrosodimethylamine ¹					Eq. 18	Eq. 19	
N-Nitrosodi-n-propylamine ¹					Eq. 18	Eq. 19	
N-Nitrosodiphenylamine ¹					Eq. 18	Eq. 19	
PCB-1016 ^{1,2}		0.014		0.03	Eq. 18	Eq. 19	
PCB-1221 ^{1,2}		0.014		0.03	Eq. 18	Eq. 19	
PCB-1232 ^{1,2}		0.014		0.03	Eq. 18	Ea. 19	
PCB-1242 1,2		0.014		0.03	Eq. 18	Eq. 19	
PCB-1248 1,2		0.014		0.03	Eq. 18	Eq. 19	
PCB-1254 1,2		0.014		0.03	Eq. 18	Eq. 19	
PCB-1260 1,2		0.014		0.03	Eq. 18	Eq. 19	
Pentachlorophenol ¹	Eq. 11	Eq. 12	13	7.9	Eq. 18	Eq. 19	

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		TABLE	1			
	TOX	IC POLLUTAN	<u>T CRITER</u>	IA		
Aquatic Life Criteria Human Health Cri						
	(111 µ	ig/I unless othe	erwise noted	1) Marina	$(\ln \mu g/1 \text{ unless of } $	
Pollutant	Acute	Chronic	Acute	Chronic	Water and Fish	of Fish Only
	neute	emonie	neute	Childhie	Water and Fish	
Phenol					Eq. 16	Eq. 17
Pyrene					Eq. 16	Eq. 17
Selenium ³	20	5.0	290	71	Eq. 16	Eq. 17
Silver	Eq. 13		1.9		-	-
1,1,2,2-Tetrachloroethane ¹	-				Eq. 18	Eq. 19
Tetrachloroethylene ¹					Eq. 18	Eq. 19
Thallium					Eq. 16	Eq. 17
Toluene					Eq. 16	Eq. 17
Toxaphene ¹	0.73	0.0002	0.21	0.0002	Ea. 18	Ea. 19
1.2-Trans-dichloroethylene					Eq. 16	Eq. 17
Tributyltin (TBT)	0.46	0.072	0.42	0.0074	- 1 1	- 1
1,2,4-Trichlorobenzene					Eq. 16	Eq. 17
1.1.2-Trichloroethane ¹					Ea. 18	Eq. 19
Trichloroethylene ¹					Eq. 18	Eq. 19
0.4.6 Trichlorophenol 1					Fa 18	Fa 10
Vinul chloride 1					Eq. 10 Fa. 18	Eq. 19 $\mathbf{F}_{\mathbf{q}}$
	\mathbf{F}_{α} 14	F ~ 15	00	01	Eq. 10 Eq. 16	Eq. 19 Eq. 17
ZIIIC	Eq. 14	Eq. 15	90	01	Eq. 10	Eq. 17

¹ Pollutants considered by EPA to be carcinogenic.

 2 The criteria for Polychlorinated Biphenyls (PCBs) apply to total PCBs, which is defined as the sum of the seven particular Aroclors (1016, 1221, 1232, 1242, 1248, 1254, and 1260) listed in this table.

³ The freshwater aquatic life criteria for selenium are expressed in terms of total recoverable metal in the water column.

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POLLUTANT	CAS Registry Number	REFERENCE DOSE mg/(kg-day)	CANCER POTENCY FACTOR (kg-day)/mg	BIO- CONCENTRATION FACTOR 1/kg	RELATIVE SOURCE CONTRIBUTION
Acenaphthene	83329	0.06		242	1.0
Acrolein	107028	0.0005		215	1.0
Acrylonitrile	107131		0.54	30	
Aldrin	309002		17	4670	
Anthracene	120127	0.3		30	1.0
Antimony	7440360	0.0004		1	0.4
Arsenic	7440382		1.75	44	
Benzene	71432		0.029	5.2	
Benzidine	92875		230	87.5	
Benzo(a)anthracene	56553		7.3	30	
Benzo(a)pyrene	50328		7.3	30	
Benzo(b)fluoranthene	205992		7.3	30	
Benzo(k)fluoranthene	207089		7.3	30	
Bis(2-chloroethyl)ether	111444		1.1	6.9	
Bis(2-chloroisopropyl)ether	108601	0.04		2.47	1.0
Bis(2-ethylhexyl)phthalate	117817		0.014	130	
Bromoform	75252		0.0079	3.75	
Butylbenzyl phthalate	85687	0.2		414	1.0
Carbon tetrachloride	56235		0.13	18.75	
Chlordane	57749		0.35	14100	
Chlorobenzene	108907	0.02		10.3	0.2
Chlorodibromomethane	124481		0.084	3.75	
Chloroform	67663		0.0061	3.75	

ροι ι μγανγ	CAS Registry Number	REFERENCE DOSE mg//kg.dow)	CANCER POTENCY FACTOR	BIO- CONCENTRATION FACTOR	RELATIVE SOURCE
2-Chloronanbthalene	91587	<u> </u>	(kg-uay)/ ing	202	1.0
2-Chlorophenol	95578	0.005		134	1.0
Chrysene	218019	0.000	7.3	30	110
Cvanide	57125	0.02		1	0.2
4.4'-DDD	72548	0.00	0.24	53600	
4,4'-DDE	72559		0.34	53600	
4,4'-DDT	50293		0.34	53600	
Dibenzo(a,h)anthracene	53703		7.3	30	
1,2-Dichlorobenzene	95501	0.09		55.6	0.2
1,3-Dichlorobenzene	541731	0.0134		55.6	1.0
1,4-Dichlorobenzene	106467	0.0134		55.6	0.2
3,3'-Dichlorobenzidine	91941		0.45	312	
Dichlorobromomethane	75274		0.062	3.75	
1,2-Dichloroethane	107062		0.091	1.2	
1,1-Dichloroethylene	75354	0.05		5.6	0.2
2,4-Dichlorophenol	120832	0.003		40.7	1.0
1,2-Dichloropropane	78875		0.067	4.1	
1,3-Dichloropropylene	542756		0.1	1.9	
Dieldrin	60571		16	4670	
Diethyl phthalate	84662	0.8		73	1.0
2,4 Dimethylphenol	105679	0.02		93.8	1.0
Dimethyl phthalate	131113	10		36	1.0
Di-n-butyl phthalate	84742	0.1		89	1.0

ροι ι μταντ	CAS Registry Number	REFERENCE DOSE	CANCER POTENCY FACTOR (kg daw)/mg	BIO- CONCENTRATION FACTOR	RELATIVE SOURCE
4.6-Dinitro-2-methylphenol	534521	0.00039	(kg-uay)/ mg	5.5	1.0
2.4-Dinitrophenol	51285	0.002		1.5	1.0
2,4 Dinitrotoluene	121142		0.31	3.8	
Dioxin (2,3,7,8-TCDD)	1746016		17500	5000	
1,2-Diphenylhydrazine	122667		0.8	24.9	
Endosulfan (alpha)	959988	0.006		270	1.0
Endosulfan (beta)	33213659	0.006		270	1.0
Endosulfan sulfate	1031078	0.006		270	1.0
Endrin	72208	0.0003		3970	0.2
Endrin aldehyde	7421934	0.0003		3970	1.0
Ethylbenzene	100414	0.1		37.5	0.2
Fluoranthene	206440	0.04		1150	1.0
Fluorene	86737	0.04		30	1.0
Heptachlor	76448		4.5	11200	
Heptachlor epoxide	1024573		9.1	11200	
Hexachlorobenzene	118741		1.6	8690	
Hexachlorobutadiene	87683		0.078	2.78	
Hexachlorocyclohexane (alpha)	319846		6.3	130	
Hexachlorocyclohexane (beta)	319857		1.8	130	
Hexachlorocyclohexane (gamma)	58899	0.0003		130	0.2
Hexachlorocyclopentadiene	77474	0.006		4.34	0.2
Hexachloroethane	67721		0.014	86.9	
Indeno (1,2,3-cd) pyrene	193395		7.3	30	

POLLUTANT	CAS Registry Number	REFERENCE DOSE mg/(kg-day)	CANCER POTENCY FACTOR (kg-day)/mg	BIO- CONCENTRATION FACTOR 1/kg	RELATIVE SOURCE CONTRIBUTION
Isophorone	78591		0.00095	4.38	
Mercury	7439976	0.0001		5500	1.0
Methyl bromide	74839	0.0014		3.75	1.0
Methylene chloride	75092		0.0075	0.9	
Nickel	7440020	0.02		47	1.0
Nitrobenzene	98953	0.0005		2.89	1.0
N-Nitrosodimethylamine	62759		51	0.026	
N-Nitrosodi-n-propylamine	621647		7	1.13	
N-Nitrosodiphenylamine	86306		0.0049	136	
PCB-1016 ¹	12674112		2.0	31200	
PCB-1221 ¹	11104282		2.0	31200	
PCB-1232 1	11141165		2.0	31200	
PCB-1242 ¹	53469219		2.0	31200	
PCB-1248 ¹	12672296		2.0	31200	
PCB-1254 ¹	11097691		2.0	31200	
PCB-1260 ¹	11096825		2.0	31200	
Pentachlorophenol	87865		0.12	11	
Phenol	108952	0.3		1.4	1.0
Pyrene	129000	0.03		30	1.0
Selenium	7782492	0.005		4.8	1.0
1,1,2,2-Tetrachloroethane	79345		0.2	5	
Tetrachloroethylene	127184		0.039776	30.6	
Thallium	7440280	0.000068		116	0.2

POLLUTANT	CAS Registry Number	REFERENCE DOSE mg/(kg-day)	CANCER POTENCY FACTOR (kg-day)/mg	BIO- CONCENTRATION FACTOR 1/kg	RELATIVE SOURCE CONTRIBUTION
Toluene	108883	0.2		10.7	0.2
Toxaphene	8001352		1.1	13100	
1,2-Trans-dichloroethylene	156605	0.02		1.58	0.2
1,2,4-Trichlorobenzene	120821	0.01		114	0.2
1,1,2-Trichloroethane	79005		0.057	4.5	
Trichloroethylene	79016		0.0126	10.6	
2,4,6-Trichlorophenol	88062		0.011	150	
Vinyl chloride	75014		1.4	1.17	
Zinc	7440666	0.3		47	1.0

¹ The criteria for Polychlorinated Biphenyls (PCBs) apply to total PCBs, which is defined as the sum of the seven particular Aroclors (1016, 1221, 1232, 1242, 1248, 1254, and 1260) listed in this table.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION - WATER QUALITY PROGRAM

CHAPTER 335-6-11 USE CLASSIFICATIONS FOR SURFACE WATERS

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335-6-11-.01 The Use Classification System.

(1) Use classifications utilized by the State of Alabama are as follows:

Outstanding Alabama Water	OAW
Public Water Supply	PWS
Swimming and Other Whole Body Water-Contact Sports	S
Shellfish Harvesting	SH
Fish and Wildlife	F&W
Limited Warmwater Fishery	LWF
Agricultural and Industrial Water Supply	A&I

(2) Use classifications apply water quality criteria adopted for particular uses based on existing utilization, uses reasonably expected in the future, and those uses not now possible because of correctable pollution but which could be made if the effects of pollution were controlled or eliminated. Of necessity, the assignment of use classifications must take into consideration the physical capability of waters to meet certain uses.

(3) Those use classifications presently included in the standards are reviewed informally by the Department's staff as the need arises, and the entire standards package, to include the use classifications, receives a formal review at least once every three years. Efforts currently underway through local 201 planning projects will provide additional technical data on certain waterbodies in the State, information on treatment alternatives, and applicability of various management techniques, which, when available, will hopefully lead to new decisions regarding use classifications. Of particular interest are those segments which are currently classified for any usage which has an associated degree of quality criteria considered to be less than that applicable to a classification of "Fish and Wildlife." As rapidly as it can be demonstrated that new classifications are feasible and attainable on these segments from an economic and technological viewpoint, based on the information being generated pursuant to water quality studies and the planning efforts previously outlined, such improvement will be proposed. For those segments where such a demonstration cannot be made, use attainability analyses describing in detail the factors

preventing attainment of the "Fish and Wildlife" use will be prepared pursuant to federal requirements and updated as new information becomes available.

(4) Although it is not explicitly stated in the classifications, it should be understood that the use classification of "Shellfish Harvesting" is only applicable in the coastal area and, therefore, is included only in the Mobile River Basin, Escatawpa River Basin, and the Perdido River Basin. It should also be noted that with the exception of those segments in the "Public Water Supply" classification, every segment, in addition to being considered acceptable for its designated use, is also considered acceptable for any other use with a less stringent associated criteria.

(5) Not all waters are included by name in the use classifications since it would be a tremendous administrative burden to list all waterbody segments in the State. In addition, in virtually every instance where a segment is not included by name, the Department has no information or waterbody data upon which to base a decision relative to the assignment of a particular classification. An effort has been made, however, to include all major waterbody segments and all segments that, to the Department's knowledge, are currently recipients of point source discharges. Those segments which are not included by name will be considered to be acceptable for a "Fish and Wildlife" classification unless it can be demonstrated that such a generalization is inappropriate in specific instances.

Author: James E. McIndoe; Chris L. Johnson.

Statutory Authority: <u>Code of Alabama</u> 1975, §§22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

History: May 5, 1967. **Amended:** June 19, 1967; April 1, 1970; October 16, 1972; September 17, 1973; May 30, 1977; December 19, 1977; February 4, 1981; April 5, 1982; December 11, 1985; March 26, 1986; September 7, 2000; May 27, 2008; April 1, 2014; February 3, 2017.

335-6-11-.02 <u>Use Classifications</u>.

(1) **THE ALABAMA RIVER BASIN**

Waterbody	From	То	Classification
ALABAMA RIVER	MOBILE RIVER	Claiborne Lock and Dam	F&W
ALABAMA RIVER (Claiborne Lake)	Claiborne Lock and Dam	Alabama and Gulf Coast Railway	S/F&W
ALABAMA RIVER (Claiborne Lake)	Alabama and Gulf Coast Railway	River Mile 131	F&W
ALABAMA RIVER (Claiborne Lake)	River Mile 131	Millers Ferry Lock and Dam	PWS

Waterbody	From	То	Classification
ALABAMA RIVER (Dannelly Lake)	Millers Ferry Lock and Dam	Sixmile Creek	S/F&W
ALABAMA RIVER (Dannelly Lake)	Sixmile Creek	Robert F Henry Lock and Dam	F&W
ALABAMA RIVER (Woodruff Lake)	Robert F Henry Lock and Dam	Pintlala Creek	S/F&W
ALABAMA RIVER (Woodruff Lake)	Pintlala Creek	Its source	F&W
Little River	ALABAMA RIVER	Its source	S/F&W
Chitterling Creek (Little River Lake)	Within Little River Sta	ate Forest	S/F&W
Randons Creek	Lovetts Creek	Its source	F&W
Bear Creek	Randons Creek	Its source	F&W
Limestone Creek	ALABAMA RIVER	Its source	F&W
Double Bridges Creek	Limestone Creek	Its source	F&W
Hudson Branch	Limestone Creek	Its source	F&W
Big Flat Creek	ALABAMA RIVER	Its source	S/F&W
Pursley Creek	Claiborne Lake	Its source	F&W
Beaver Creek (Claiborne Lake)	ALABAMA RIVER	Extent of reservoir	F&W
Beaver Creek	Claiborne Lake	Its source	F&W
Cub Creek	Beaver Creek	Its source	F&W
Turkey Creek	Beaver Creek	Its source	F&W
Rockwest Creek	Claiborne Lake	Its source	F&W
Pine Barren Creek	Dannelly Lake	Its source	S/F&W
Chilatchee Creek	Dannelly Lake	Its source	S/F&W

Waterbody	From	То	Classification
Bogue Chitto Creek	Dannelly Lake	Its source	F&W
Sand Creek	Bogue Chitto Creek	Its source	F&W
Cedar Creek	Dannelly Lake	Its source	S/F&W
Valley Creek	Dannelly Lake	Selma-Summerfield Road	F&W
Valley Creek	Selma-Summerfield Road	Valley Creek Lake Dam	S/F&W
Valley Creek (Valley Creek Lake)	Within Paul M Grist S	State Park	S/F&W
Mulberry Creek	Dannelly Lake	Harris Branch	S/F&W
Mulberry Creek	Harris Branch	Its source	F&W
Gale Creek	Mulberry Creek	Its source	F&W
Charlotte Creek	Gale Creek	Its source	F&W
Big Swamp Creek	Dannelly Lake	Its source	S/F&W
Swift Creek	Woodruff Lake	Its source	S/F&W
Pintlala Creek	Woodruff Lake	Its source	S/F&W
Autauga Creek	Woodruff Lake	Matthews Branch	F&W
Autauga Creek	Matthews Branch	Its source	S/F&W
Catoma Creek	Woodruff Lake	Its source	F&W
Mortar Creek	ALABAMA RIVER	Its source	F&W

(2) THE BLACK WARRIOR RIVER BASIN

Waterbody	From	То	Classification
BLACK WARRIOR RIVER (Lake Demopolis)	TOMBIGBEE RIVER	Five miles upstream from Big Prairie Creek	S/F&W

Waterbody	From	То	Classification
BLACK WARRIOR RIVER (Lake Demopolis)	Five miles upstream from Big Prairie Creek	Eight miles upstream from Big Prairie Creek	PWS/S/F&W
BLACK WARRIOR RIVER (Lake Demopolis)	Eight miles upstream from Big Prairie Creek	Selden Lock and Dam	S/F&W
BLACK WARRIOR RIVER (Warrior Lake)	Selden Lock and Dam	Oliver Lock and Dam	F&W
BLACK WARRIOR RIVER (Oliver Lake)	Oliver Lock and Dam	Holt Lock and Dam	S/F&W ¹
BLACK WARRIOR RIVER (Holt Lake)	Holt Lock and Dam	Bankhead Lock and Dam	$S/F\&W^1$
BLACK WARRIOR RIVER (Bankhead Lake)	Bankhead Lock and Dam	Its source	PWS/S/F&W
Locust Fork (Bankhead Lake)	BLACK WARRIOR RIVER	Jefferson County Highway 61 (Maxine)	PWS/S/F&W
Locust Fork (Bankhead Lake)	Jefferson County Highway 61 (Maxine)	Village Creek	S/F&W
Locust Fork	Village Creek	US Highway 31	S/F&W
Locust Fork	US Highway 31	Kelly Creek	PWS/S/F&W
Locust Fork	Kelly Creek	Slab Creek	F&W
Locust Fork	Slab Creek	Its source	S/F&W
Mulberry Fork (Bankhead Lake)	BLACK WARRIOR RIVER	Burnt Cane Creek	PWS/S/F&W
Mulberry Fork (Bankhead Lake)	Burnt Cane Creek	Frog Ague Creek	PWS/F&W
Mulberry Fork (Bankhead Lake)	Frog Ague Creek	Sipsey Fork	PWS/F&W
Mulberry Fork	Sipsey Fork	Its source	F&W

¹Applicable dissolved oxygen level below existing impoundments is 4.0 mg/l.

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Waterbody	From	То	Classification
Sipsey Fork (Bankhead Lake)	Mulberry Fork	Lewis Smith Dam	PWS/F&W
Sipsey Fork (Smith Lake)	Lewis Smith Dam	Three miles upstream from Lewis Smith Dam	PWS/S/F&W
Sipsey Fork (Smith Lake)	Three miles upstream from Lewis Smith Dam	Extent of reservoir	S/F&W
Sipsey Fork	Smith Lake	Sandy Creek	F&W
Sipsey Fork and tributaries	Sandy Creek	Its source	S/F&W ³
Big Prairie Creek	Demopolis Lake	Its source	F&W
Cottonwood Creek	Big Prairie Creek	Its source	F&W
White Creek	Demopolis Lake	Its source	F&W
Big Brush Creek	Warrior Lake	Its source	F&W
Colwell Creek	Big Brush Creek	Its source	F&W
Minter Creek	Warrior Lake	Its source	F&W
Fivemile Creek	Warrior Lake	Payne Lake Dam	F&W
Fivemile Creek (Payne Lake)	Payne Lake Dam	Extent of reservoir	S
Elliotts Creek	Warrior Lake	Its source	F&W
Cypress Creek	Warrior Lake	Its source	F&W
North River	Oliver Lake	Lake Tuscaloosa Dam	F&W
North River (Lake Tuscaloosa)	Lake Tuscaloosa Dam	Binion Creek	PWS/S

³The special designation of Outstanding National Resource Water applies to this segment.

Waterbody	From	То	Classification
North River (Lake Tuscaloosa)	Binion Creek	Extent of reservoir	F&W
North River	Lake Tuscaloosa	Ellis Creek	F&W
North River	Ellis Creek	Its source	S/F&W
Binion Creek	Lake Tuscaloosa	Its source	F&W
Cedar Creek	North River	Its source	F&W
Clear Creek	North River	Bugs Lake Dam	F&W
Clear Creek (Bugs Lake)	Bugs Lake Dam	Its source	PWS
Hurricane Creek	Oliver Lake	Its source	F&W
Yellow Creek	Oliver Lake	Lake Harris Dam	F&W
Yellow Creek (Lake Harris)	Lake Harris Dam	Lake Nicol Dam	PWS
Yellow Creek (Lake Nicol)	Lake Nicol Dam	Extent of reservoir	PWS
Yellow Creek	Lake Nicol	Its source	PWS
Davis Creek	Holt Lake	Its source	F&W
Blue Creek	Holt Lake	Its source	F&W
Big Yellow Creek (Bankhead Lake)	BLACK WARRIOR RIVER	Extent of reservoir	S/F&W
Big Yellow Creek	Bankhead Lake	Its source	S/F&W
Valley Creek (Bankhead Lake)	Black Warrior River	Extent of reservoir	S/F&W
Valley Creek	Bankhead Lake	Mud Creek	F&W
Valley Creek	Mud Creek	Rock Creek	S/F&W
Valley Creek	Rock Creek	Blue Creek	F&W
Valley Creek	Blue Creek	Its source	LWF

Waterbody	From	То	Classification
Opossum Creek	Valley Creek	Its source	A&I
Village Creek	Locust Fork	Bayview Lake Dam	S/F&W
Village Creek (Bayview Lake)	Bayview Lake Dam	Extent of reservoir	LWF
Village Creek	Bayview Lake	Its source	LWF
Fivemile Creek	Locust Fork	Old Jasper Highway	S/F&W
Fivemile Creek	Old Jasper Highway	Alabama Highway 79	F&W
Fivemile Creek	Alabama Highway 79	Its source	S/F&W
Turkey Creek	Locust Fork	Its source	F&W
Cunningham Creek	Turkey Creek	Its source	F&W
Self Creek	Gurley Creek	Alabama Highway 79	F&W
Self Creek	Alabama Highway 79	Its source	PWS
Gurley Creek	Locust Fork	Its source	F&W
Little Warrior River	Locust Fork	Its source	F&W
Calvert Prong	Little Warrior River	Calvert Prong dam above US Highway 231	F&W
Calvert Prong	Calvert Prong dam above US Highway 231	Its source	PWS
Blackburn Fork	Little Warrior River	Inland Lake Dam	F&W
Blackburn Fork (Inland Lake)	Inland Lake Dam	Extent of reservoir	PWS/S
Blackburn Fork	Inland Lake	Its source	PWS/S
Chitwood Creek	Calvert Prong	Its source	F&W
Mill Creek	Chitwood Creek	Its source	F&W
Graves Creek	Locust Fork	Its source	F&W

Waterbody	From	То	Classification
Whippoorwill Creek	Wynnville Creek	Its source	F&W
Clear Creek	Locust Fork	Its source	F&W
Slab Creek	Locust Fork	Its source	F&W
Lost Creek	Mulberry Fork	Two miles upstream from Wolf Creek	S/F&W
Lost Creek	Two miles upstream from Wolf Creek	Cane Creek	PWS/F&W
Lost Creek	Cane Creek	Indian Creek	S/F&W
Lost Creek	Indian Creek	Cranford Creek	F&W
Lost Creek	Cranford Creek	Its source	S/F&W
Cane Creek (Oakman)	Lost Creek	Dixie Springs Road	F&W
Cane Creek (Oakman)	Dixie Springs Road	Alabama Highway 69	LWF
Cane Creek (Oakman)	Alabama Highway 69	Its source	F&W
Indian Creek	Lost Creek	Its source	F&W
Wolf Creek	Lost Creek	Its source	S/F&W
Burnt Cane Creek	Mulberry Fork	Its source	F&W
Cane Creek (Jasper)	Mulberry Fork	Town Creek	LWF
Cane Creek (Jasper)	Town Creek	Its source	F&W
Town Creek	Cane Creek	100 yards upstream of Norfolk Southern Railway	LWF
Town Creek	100 yards upstream of Norfolk Southern Railway	Its source	F&W
Blackwater Creek	Mulberry Fork	Its source	F&W
Mud Creek	Mulberry Fork	Its source	F&W

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Waterbody	From	То	Classification
Broglen River	Mulberry Fork	Its source	F&W
Brindley Creek Eightmile Creek	Broglen River Broglen River	Its source Lake Catoma Dam	PWS F&W
Eightmile Creek	Lake Catoma Dam	Its source	PWS
Bridge Creek	Eightmile Creek	George Lake Dam	F&W
Bridge Creek (George Lake)	George Lake Dam	Its source	PWS
Adams Branch	George Lake	Its source	PWS
Pope Creek	George Lake	Its source	PWS
Blue Springs Creek	Mulberry Fork	Its source	F&W
Duck River	Mulberry Fork	Duck River Reservoir Dam	F&W
Duck River (Duck River Reservoir)	Duck River Reservoir Dam	Extent of reservoir	PWS/F&W
Duck River	Duck River Reservoir	Its source	F&W
Warrior Creek	Mulberry Fork	Its source	F&W
Tibb Creek	Mulberry Fork	Its source	F&W
Riley Maze Creek	Tibb Creek	Its source	F&W
Ryan Creek	Smith Lake	Its source	F&W
Crooked Creek	Smith Lake	Its source	F&W
Brushy Creek	Smith Lake	US Highway 278	PWS/F&W
Brushy Creek	US Highway 278	Its source	F&W
Clear Creek (Smith Lake)	Sipsey Fork	Extent of reservoir	PWS/S/F&W
Clear Creek	Smith Lake	Haleyville City Lake Dam	F&W

Waterbody	From	То	Classification
Clear Creek	Haleyville City Lake Dam	Its source	PWS
Rock Creek	Smith Lake	Its source	F&W
Sandy Creek	Sipsey Fork	Its source	F&W
Curtis Mill Creek	Sandy Creek	Town of Double Springs water supply reservoir dam	F&W
Curtis Mill Creek	Town of Double Springs water supply reservoir dam	Its source	PWS

(3) THE BLACKWATER RIVER BASIN

Waterbody	From	То	Classification
BLACKWATER RIVER	Alabama-Florida state line	Its source	F&W
Big Juniper Creek	Alabama-Florida state line	Its source	F&W
Sweetwater Creek	Alabama-Florida state line	Its source	F&W
Rock Creek	Alabama-Florida state line	Its source	F&W
Boggy Hollow Creek	Alabama-Florida state line	Its source	F&W

(4) THE CAHABA RIVER BASIN

Waterbody	From	То	Classification
CAHABA RIVER	ALABAMA RIVER	Junction of lower Little Cahaba River	OAW/S
CAHABA RIVER	Little Cahaba River (Bibb County)	Shelby County Road 52	OAW/F&W
CAHABA RIVER	Shelby County Road 52	Dam near US Highway 280	F&W

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Waterbody	From	То	Classification
CAHABA RIVER	Dam near US Highway 280	Grants Mill Road	OAW/PWS
CAHABA RIVER	Grants Mill Road	US Highway 11	F&W
CAHABA RIVER	US Highway 11	Its source	OAW/F&W
Childers Creek	CAHABA RIVER	Its source	F&W
Oakmulgee Creek Little Oakmulgee Creek	CAHABA RIVER Oakmulgee Creek	Its source Its source	S S
Rice Creek	CAHABA RIVER	Its source	F&W
Waters Creek	CAHABA RIVER	Its source	S
Old Town Creek	CAHABA RIVER	Its source	S
Blue Girth Creek	CAHABA RIVER	Its source	S
Affonee Creek	CAHABA RIVER	Its source	S
Haysop Creek	CAHABA RIVER	Its source	F&W
Schultz Creek	CAHABA RIVER	Its source	S
Little Cahaba River (Bibb County)	CAHABA RIVER	Its source	OAW/F&W
Sixmile Creek	Little Cahaba River	Its source	S
Mahan Creek	Little Cahaba River	Its source	F&W
Shoal Creek	Little Cahaba River	Its source	F&W
Caffee Creek	CAHABA RIVER	Its source	F&W
Shades Creek	CAHABA RIVER	Its source	F&W
Buck Creek	CAHABA RIVER	Cahaba Valley Creek	F&W
Buck Creek	Cahaba Valley Creek	Shelby County Road 44	LWF ⁴

⁴Applicable dissolved oxygen level is 4.0 mg/l during May through November. Fish and Wildlife E. coli bacteria criteria at paragraph 10-.09(5)(e)7 are applicable

Waterbody	From	То	Classification
Buck Creek	Shelby County Road 44	Its source	F&W
Cahaba Valley Creek	Buck Creek	Its source	F&W
Peavine Creek	Buck Creek	Its source	F&W
Oak Mountain State	Park Lakes		PWS
Patton Creek	CAHABA RIVER	Its source	F&W
Little Shades Creek	CAHABA RIVER	Its source	F&W
Little Cahaba River (Jefferson-Shelby Counties)	CAHABA RIVER	Lake Purdy Dam	PWS
Little Cahaba River (Lake Purdy)	Lake Purdy Dam	Extent of reservoir	PWS
Little Cahaba River (Jefferson County)	Lake Purdy	Its source	F&W

(5) THE CHATTAHOOCHEE RIVER BASIN

Waterbody	From	То	Classification
CHATTAHOOCHEE RIVER	Alabama-Florida state line	Woods Branch	F&W
CHATTAHOOCHEE RIVER	Woods Branch	Walter F George Dam	S/F&W
CHATTAHOOCHEE RIVER (Walter F George Lake)	Walter F George Dam	Cowikee Creek	S/F&W
CHATTAHOOCHEE RIVER (Walter F George Lake)	Cowikee Creek	14th Street Bridge between Columbus and Phenix City	F&W

year-round. For the purpose of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 10 years (7Q₁₀) shall be the basis for applying the chronic aquatic life criteria.

Waterbody	From	То	Classification
CHATTAHOOCHEE RIVER	14th Street Bridge between Columbus and Phenix City	Oliver Dam	PWS/S/F&W
CHATTAHOOCHEE RIVER (Lake Oliver)	Oliver Dam	Goat Rock Dam	PWS/S/F&W
CHATTAHOOCHEE RIVER (Goat Rock Lake)	Goat Rock Dam	Bartletts Ferry Dam	PWS/S/F&W
CHATTAHOOCHEE RIVER (Lake Harding)	Bartletts Ferry Dam	Osanippa Creek	PWS/S/F&W
CHATTAHOOCHEE RIVER (Lake Harding)	Osanippa Creek	Johnson Island	F&W
CHATTAHOOCHEE RIVER	Johnson Island	River Mile 197.2	F&W
CHATTAHOOCHEE RIVER	River Mile 197.2	West Point Dam	PWS
CHATTAHOOCHEE RIVER (West Point Lake)	West Point Dam	Extent of reservoir in Alabama	S/F&W
Oseligee Creek	Alabama-Georgia state line	Its source	F&W
Wehadkee Creek	Alabama-Georgia state line	Its source	F&W
Finley Creek	Stroud Creek	Its source	F&W
Hardley Creek	Alabama-Georgia State line	Its source	F&W
Veasey Creek	Alabama-Georgia State line	Its source	F&W
Omusee Creek	CHATTAHOOCHEE RIVER	Its source	F&W
Spivey Mill Creek	Omusee Creek	Its source	F&W

Waterbody	From	То	Classification
Abbie Creek	CHATTAHOOCHEE RIVER	Its source	F&W
Skippers Creek	Abbie Creek	Its source	F&W
Vann Mills Creek	Abbie Creek	Its source	F&W
Cheneyhatchee Creek	Walter F George Lake	Its source	S/F&W
Barbour Creek	Walter F George Lake	Its source	F&W
Chewalla Creek	Walter F George Lake	Its source	S/F&W
Cowikee Creek (Walter F George Lake)	CHATTAHOOCHEE RIVER	Its source	S/F&W
North Fork of Cowikee Creek	Walter F George Lake	Its source	F&W
Middle Fork of Cowikee Creek	North Fork of Cowikee Creek	Its source	S/F&W
Hurtsboro Creek	North Fork of Cowikee Creek	Its source	F&W
South Fork of Cowikee Creek	Walter F George Lake	Its source	S/F&W
Hatchechubbee Creek	CHATTAHOOCHEE RIVER	Russell County Highway 4, west of Pittsview	S/F&W
Hatchechubbee Creek	Russell County Highway 4, west of Pittsview	Its source	F&W
Ihagee Creek	CHATTAHOOCHEE RIVER	Its source	S/F&W
Uchee Creek	Walter F George Lake	Russell County Road 39	S/F&W
Uchee Creek	Russell County Road 39	Island Creek	PWS/S/F&W

Waterbody	From	То	Classification
Uchee Creek	Island Creek	Its source	S/F&W
Halawakee Creek (Lake Harding)	CHATTAHOOCHEE RIVER	Three miles upstream of Lee County Road 279	PWS/F&W
Halawakee Creek	Three miles upstream of Lee County Road 279	Its source	F&W
Osanippa Creek	Lake Harding	Its source	F&W
Kellum Hill Creek	Osligee Creek	Its source	F&W
Allen Creek	Kellum Hill Creek	Its source	F&W
Moores Creek	CHATTAHOOCHEE RIVER	Its source	F&W
Guss Creek	Wehadkee Creek	Its source	F&W
Gladney Mill Branch	Guss Creek	Its source	F&W

(6) THE CHIPOLA RIVER BASIN

Waterbody	From	То	Classification
Big Creek	Marshall Creek	Its source	F&W
Buck Creek	Alabama-Florida state line	Its source	F&W
Cowarts Creek	Alabama-Florida state line	Its source	F&W
Limestone Creek	Big Creek	Its source	F&W
Cypress Creek	Limestone Creek	Its source	F&W
Rocky Creek	Cowarts Creek	Its source	F&W

(7) THE CHOCTAWHATCHEE RIVER BASIN
Waterbody	From	То	Classification
Pea River	CHOCTAWHATCHEE RIVER	Laddon Creek	F&W
Pea River	Laddon Creek	Alabama-Florida state line	S/F&W
Pea River	Alabama-Florida state line	Flat Creek	S/F&W
Pea River	Flat Creek	Snake Branch	F&W
Pea River	Snake Branch	Bucks Mill Creek	S/F&W
Pea River	Bucks Mill Creek	US Highway 84	F&W
Pea River	US Highway 84	Red Oak Creek	S/F&W
Pea River	Red Oak Creek	Halls Creek	F&W
Pea River	Halls Creek	US Highway 231	S/F&W
Pea River	US Highway 231	Pike/Barbour County Road 77	F&W
Pea River	Pike/Barbour County Road 77	Kaiser Branch	S/F&W
Pea River	Kaiser Branch	Buckhorn Creek	F&W
Pea River	Buckhorn Creek	Connors Creek	S/F&W
Pea River	Connors Creek	Its source	F&W
CHOCTAWHATCHEE RIVER	Alabama-Florida state line	Alabama Highway 12	S/F&W
CHOCTAWHATCHEE RIVER	Alabama Highway 12	Brooking Mill Creek	F&W
CHOCTAWHATCHEE RIVER	Brooking Mill Creek	Its Source	S/F&W
Wrights Creek	Alabama-Florida state line	Its source	F&W
Holmes Creek	Alabama-Florida state line	Its source	F&W

Waterbody	From	То	Classification
Tenmile Creek	Alabama-Florida state line	Its source	F&W
Sandy Creek	Pea River	Its source	F&W
Flat Creek	Pea River	Eightmile Creek	F&W
Flat Creek	Eightmile Creek	Its source	S/F&W
Eightmile Creek	Flat Creek	Alabama-Florida state line	F&W
Corner Creek	Eightmile Creek	Its source	F&W
Cripple Creek	Pea River	Its source	F&W
Samson Branch	Pea River	Its source	F&W
Whitewater Creek	Pea River	Its source	F&W
Big Creek	Whitewater Creek	Its source	F&W
Walnut Creek	Whitewater Creek	Its source	F&W
Mims Creek	Whitewater Creek	Its source	F&W
Pea Creek	Pea River	Its source	F&W
Double Bridges Creek	CHOCTAWHATCHEE RIVER	Its source	F&W
Blanket Creek	Double Bridges Creek	Its source	F&W
Claybank Creek	CHOCTAWHATCHEE RIVER	Lake Tholocco Dam	F&W
Claybank Creek (Lake Tholocco)	Lake Tholocco Dam	Extent of reservoir	S/F&W
Claybank Creek	Lake Tholocco	Its source	F&W
Harrand Creek	Claybank Creek	Its source	F&W
Indian Camp Creek	Harrand Creek	Its source	F&W
Hurricane Creek (Geneva County)	CHOCTAWHATCHEE RIVER	Its source	F&W

Waterbody	From	То	Classification
Cox Mill Creek	Hurricane Creek	Its source	F&W
Little Choctawhatchee River	CHOCTAWHATCHEE RIVER	Its source	F&W
Newton Creek	Little Choctawhatchee River	Its source	F&W
Beaver Creek	Newton Creek	Its source	F&W
Hurricane Creek (Dale County)	CHOCTAWHATCHEE RIVER	Its source	F&W
West Fork Choctawhatchee River	CHOCTAWHATCHEE RIVER	Big Creek	S/F&W
West Fork Choctawhatchee River	Big Creek	Judy Creek	F&W
West Fork Choctawhatchee River	t Fork Judy Creek ctawhatchee r		S/F&W
Judy Creek West Fork Choctawhatchee River		Its source	F&W
Little Judy Creek	Judy Creek	Its source	F&W
Lindsey Creek	West Fork Choctawhatchee River	Its source	F&W
East Fork Choctawhatchee River	CHOCTAWHATCHEE RIVER	Its source	S/F&W
Blackwood Creek	East Fork Choctawhatchee River	Its source	F&W

(8) THE COOSA RIVER BASIN

Waterbody	From	То	Classification
COOSA RIVER	TALLAPOOSA RIVER	Dead River	F&W
COOSA RIVER	Dead River	Jordan Dam	S/F&W
COOSA RIVER (Jordan Lake)	Jordan Dam	Mitchell Dam	S/F&W
COOSA RIVER (Jordan Lake)	Bouldin Dam	Alabama Highway 111	PWS/S/F&W
COOSA RIVER (Mitchell Lake)	Mitchell Dam	Lay Dam	PWS/S/F&W
COOSA RIVER (Lay Lake)	DSA RIVER Lay Dam ^r Lake)		PWS/S/F&W
COOSA RIVER (Lay Lake)	Southern RR Bridge (1-1/3 miles above Yellowleaf Creek)	River Mile 89 (1-1/2 miles above Talladega Creek)	S/F&W ⁴
COOSA RIVER (Lay Lake)	River Mile 89 (1-1/2 miles above Talladega Creek)	Logan Martin Dam	PWS/S/F&W
COOSA RIVER (Logan Martin Lake)	Logan Martin Dam	Broken Arrow Creek	S/F&W
COOSA RIVER (Logan Martin Lake)	Broken Arrow Creek	Trout Creek	PWS/S/F&W
COOSA RIVER (Logan Martin Lake)	Trout Creek	Neely Henry Dam	S/F&W
COOSA RIVER (Neely Henry Lake)	Neely Henry Dam	McCardney's Ferry (3 miles upstream of Big Canoe Creek)	S/F&W
COOSA RIVER (Neely Henry Lake)	McCardney's Ferry (3 miles upstream of Big Canoe Creek)	City of Gadsden's water supply intake	F&W
COOSA RIVER (Neely Henry Lake)	City of Gadsden's water supply intake	Weiss Dam powerhouse	PWS/S/F&W

⁴Applicable dissolved oxygen level below existing impoundments is 4.0 mg/l.

Waterbody	From	То	Classification
COOSA RIVER	Weiss Dam powerhouse	Sugar Creek	S/F&W
COOSA RIVER	Sugar Creek	Weiss Dam	F&W
COOSA RIVER (Weiss Lake)	Weiss Dam and Weiss Dam powerhouse	Spring Creek	PWS/S/F&W
COOSA RIVER (Weiss Lake)	Spring Creek	Alabama-Georgia state line	S/F&W
Bouldin Tailrace Canal (Callaway Creek)	COOSA RIVER	Bouldin Dam	F&W
Terrapin Creek	COOSA RIVER	Cherokee County Road 8	S/F&W
Terrapin Creek	Cherokee County Road 8	US Highway 278	F&W
Terrapin Creek	US Highway 278	Calhoun County Road 70, east of Vigo	PWS/S/F&W
Terrapin Creek	Calhoun County Road 70, east of Vigo	Alabama-Georgia state line	F&W
Little River and tributaries	Weiss Lake	Its source	PWS/S/ F&W ³
East Fork Little River and tributaries	Little River	Alabama-Georgia state line	PWS/S/ F&W ³
West Fork Little River and tributaries	Little River	Alabama-Georgia state line	PWS/S/ F&W ³
Chattooga River (Weiss Lake)	COOSA RIVER	Extent of reservoir	S/F&W
Chattooga River	Weiss Lake	Alabama-Georgia state line	F&W

³The special designation of Outstanding National Resource Water applies to this segment.

Waterbody	From	То	Classification
Spring Creek	Weiss Lake	Alabama-Georgia state line	F&W
Weoka Creek	Jordan Lake	Its source	S/F&W
Chestnut Creek	Jordan Lake	Its source	F&W
Hatchet Creek (Mitchell Lake)	COOSA RIVER	Extent of reservoir	S/F&W
Hatchet Creek	Mitchell Lake	Norfolk Southern Railway	OAW/S/F&W
Hatchet Creek	Norfolk Southern Railway	Junction of East Fork Hatchet Creek and West Fork Hatchet Creek	OAW/PWS/ S/F&W
East Fork Hatchet Creek	Hatchet Creek	Its source	OAW/F&W
West Fork Hatchet Creek	Hatchet Creek	Its source	OAW/F&W
Socapatoy Creek	Hatchet Creek	Its source	F&W
Weogufka Creek	Mitchell Lake	Its source	S/F&W
Walnut Creek (Mitchell Lake)	COOSA RIVER	Extent of reservoir	F&W
Walnut Creek	Mitchell Lake	Its source	F&W
Waxahatchee Creek (Lay Lake)	COOSA RIVER	Extent of reservoir	F&W
Waxahatchee Creek	Lay Lake	Its source	F&W
Buxahatchee Creek	Lay Lake	Its source	F&W
Yellowleaf Creek (Lay Lake)	COOSA RIVER	Extent of reservoir	S/F&W
Yellowleaf Creek	Lay Lake	Its source	S/F&W
Tallasseehatchee Creek	Lay Lake	Howard Dam	F&W

Waterbody	From	То	Classification
Tallasseehatchee Creek	Howard Dam	Its source	PWS/F&W
Shirtee Creek	Tallasseehatchee Creek	Its source	F&W
Talladega Creek	Lay Lake	Drivers Branch	F&W
Talladega Creek	Drivers Branch	Alabama Highway 77	PWS/F&W
Talladega Creek	Alabama Highway 77	Its source	F&W
Mump Creek	Talladega Creek	Mump Creek Reservoir Dam	F&W
Mump Creek	Mump Creek Reservoir Dam	Its source	PWS/F&W
Kelly Creek	Lay Lake	Its source	S/F&W
Wolf Creek	Kelly Creek	Its source	F&W
Choccolocco Creek	Logan Martin Lake	Unnamed tributary from Boiling Spring	F&W
Choccolocco Creek	Unnamed tributary from Boiling Spring	Egoniaga Creek	PWS/F&W
Choccolocco Creek	Egoniaga Creek	Its source	F&W
Eastaboga Creek	Choccolocco Creek	Its source	F&W
Cheaha Creek	Choccolocco Creek	Chinnabee Dam	S/F&W
Cheaha Creek (Lake Chinnabee)	Chinnabee Dam	Extent of reservoir	S/F&W
Cheaha Creek	Lake Chinnabee	Its source	S/F&W
Kelly Creek	Cheaha Creek	Its source	F&W
Brecon Branch	Kelly Creek	Its source	F&W
Coldwater Spring Branch	Choccolocco Creek Its source		F&W
Coldwater Spring			PWS/F&W

Waterbody	y From To		Classification	
Snows Branch	Choccolocco Creek	Its source	F&W	
Dye Creek	Logan Martin Lake	Its source	F&W	
Cane Creek	Logan Martin Lake	Its source	F&W	
Cave Creek	Cane Creek	Its source	F&W	
Ohatchee Creek	Logan Martin Lake	Its source	S/F&W	
Tallasseehatchee Creek	Ohatchee Creek	Its source	F&W	
Big Canoe Creek	Neely Henry Lake	Its source	F&W	
Little Canoe Creek	Big Canoe Creek	Its source	F&W	
Spring Creek	Little Canoe Creek	Its source	F&W	
Big Wills Creek	Neely Henry Lake	Little Sand Valley Creek	S/F&W	
Big Wills Creek	Little Sand Valley Creek	100 yards below Allen Branch	F&W	
Big Wills Creek	100 yards below Allen Branch	Its source	PWS/F&W	
Black Creek	Neely Henry Lake	Its source	F&W	
Allen Branch	Big Wills Creek	Fort Payne Dam	F&W	
Allen Branch	Fort Payne Dam	Its source	PWS/F&W	
Hillabee Creek (Hillabee Lake)	Hillabee Lake Dam	Extent of reservoir	PWS/S/F&W	
Shoal Creek	Choccolocco Creek	Whitesides Mill Lake Dam	S/F&W	
Shoal Creek (Whitesides Mill Lake)	Whitesides Mill Lake Dam	Extent of reservoir	PWS/S/F&W	
Shoal Creek	Whitesides Mill Lake	Highrock Lake Dam	OAW/S/F&W	
Shoal Creek (Highrock Lake)	Highrock Lake Dam	Extent of reservoir	OAW/S/F&W	

Waterbody	From	То	Classification
Shoal Creek	Highrock Lake	Sweetwater Lake Dam	OAW/S/F&W
Shoal Creek (Sweetwater Lake)	Sweetwater Lake Dam	Extent of reservoir	OAW/PWS/S /F&W
Shoal Creek	Sweetwater Lake	Its source	OAW/S/F&W
Coleman Lake	Coleman Lake Dam	Extent of reservoir	S/F&W
Ladiga Creek	Terrapin Creek	Terrapin Creek	PWS

(9) THE ESCAMBIA RIVER BASIN

Waterbody	From	То	Classification
CONECUH RIVER	Alabama-Florida state line	Point A Dam	F&W
CONECUH RIVER (Point A Lake)	Point A Dam	Extent of reservoir	S/F&W
CONECUH RIVER	Point A Lake	Gantt Dam	S/F&W
CONECUH RIVER (Gantt Lake)	Gantt Dam	Extent of reservoir	F&W
CONECUH RIVER	Gantt Lake	Its source	F&W
Little Escambia Creek	Alabama-Florida state line	Its source	F&W
Big Escambia Creek	Alabama-Florida state line	Its source	F&W
Pine Barren Creek	Alabama-Florida state line	Its source	F&W
Dixon Creek	Alabama-Florida state line	Its source	F&W
Canoe Creek	Alabama-Florida state line	Its source	F&W
Reedy Creek	Alabama-Florida state line	Its source	F&W

Waterbody	From	То	Classification
Beaverdam Creek	Alabama-Florida state line	Its source	F&W
Murder Creek	CONECUH RIVER	Its source	F&W
Mill Creek	Murder Creek	Its source	F&W
Sandy Creek	Mill Creek	Its source	F&W
Burnt Corn Creek	Murder Creek	Its source	S/F&W
Sepulga River	CONECUH RIVER	Its source	F&W
Pigeon Creek	Sepulga River	Its source	F&W
Persimmon Creek	Sepulga River	Its source	F&W
Rocky Creek	Persimmon Creek	Its source	F&W
Prestwood Creek	CONECUH RIVER	Its source	F&W
Patsaliga Creek	Point A Lake	Its source	F&W
Little Patsaliga Creek	Patsaliga Creek	Its source	S/F&W
Double Branch	CONECUH RIVER	Its source	F&W
Sizemore Creek	Big Escambia Creek	Its source	S/F&W
Wet Weather Creek	Sizemore Creek	Its source	F&W

(10) THE ESCATAWPA RIVER BASIN

COASTAL WATERS

Waterbody	From	То	Classification
Mississippi Sou portion of Porte line connecting (FLR 4 seconds and lighted bea 088°14'34.8"W) each side of a s Batre and lighte 088°16'09.6"W) Long. 088°17'02 1,000 feet of the 088°07'02.1"W)	nd and contiguous rsville Bay 1,000 fe the shore at Bayou "6") (Lat. 30°22'31 con (FL 4 seconds ; that portion of Po traight line connec ed beacons (FR)(Lat , and (FLR 4 secon 2.2"W); and that po e outfall (Lat. 30°13 of the Dauphin Isl	s waters excepting: that eet on each side of a straight a Coden to a lighted beacon .2"N/ Long. 088°14'25.8"W) "1") (Lat. 30°22'23.7"N/ Long. rtersville Bay 1,000 feet on ting the shore at Bayou La t. 30°23'11.0"N/ Long. ds "6") (Lat. 30°21'05.2"N/1 ortion of Bayou Aloe within 5'52.0"N/ Long. and sewage treatment plant.	SH/S/F&W
Waters excepted	d in foregoing desc	ription of Portersville Bay and	F&W

Waters excepted in foregoing description of Portersville Bay and F&W contiguous waters

West Fowl River	Fowl River Bay	Its source	S/F&W
Bayou Coden	Portersville Bay	Its source	F&W
Bayou La Batre	Portersville Bay	Its source	F&W
Little River	Portersville Bay	Its source	F&W

NON-COASTAL WATERS

Waterbody	From	То	Classification
Big Creek	Alabama-Mississippi state line	Big Creek Lake Dam	F&W
Big Creek (Big Creek Lake)	Big Creek Lake Dam	Extent of reservoir	PWS/F&W
Big Creek	Big Creek Lake	Its source	PWS/F&W
ESCATAWPA RIVER	Alabama-Mississippi state line	Its source	S/F&W
Puppy Creek	ESCATAWPA RIVER	Its source	F&W

NOTE: Waters of the Escatawpa River Basin classified for SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS, SHELLFISH HARVESTING, and/or FISH AND WILDLIFE in which natural conditions provide an appropriate habitat for shrimp and crabs are to be suitable for the propagation and harvesting of shrimp and crabs.

(11)

THE MOBILE RIVER-MOBILE BAY BASIN

COASTAL WATERS

Waterbody	From	То	Classification
MOBILE RIVER	Its mouth	Spanish River	LWF ⁴
MOBILE RIVER	Spanish River	I-65	F&W
Tensaw River	Apalachee River	I-65	OAW/S/F&W
Martin Branch	Red Hill Creek	10 feet above MSL	F&W
MOBILE BAY	West of a line drawn due south from the western shore of Chacaloochee Bay (Lat. 30°40'47.3"N/ Long. 87°59'44.2"W)	North of a line drawn due east of the mouth of Dog River (Lat. 30°33'53.2"N/ Long. 88°05'15.3"W)	F&W
MOBILE BAY	South of a line drawn due east from the mouth of Dog River (Lat. 30°33'53.2"N/Long. 088°05'15.3"W) and east of a line drawn due south from the western shore of Chacaloochee Bay (Lat. 30°40'47.3"N/Long. 087°59'44.2"W) and all other portions of MOBILE BAY		S/F&W
MOBILE BAY	All that portion lying south of a line extending in an easterly direction from the south bank of East Fowl River at its mouth (Lat. 30°27'03.1"N/ Long. 088°06'22.6"W) through lighted beacon (FL 2 seconds) (Lat. 30°27'07.5"N/ Long. 088°05'39.3"W) to lighted beacon (FLG 4 seconds "23") (Lat. 30°27'18.3"N/ Long. 088°00'58.3"W) at the Mobile Ship Channel thence in a northeasterly direction to Daphne (Bench Mark 157, Lat. 30°36'07.5"N/ Long. 087°54'16.4"W)		SH/F&W

⁴For the purpose of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 10 years ($7Q_{10}$) shall be the basis for applying the chronic aquatic life criteria.

Waterbody	From	То	Classification
Bon Secour Bay	In its entirety (east an connecting Mullet Poi 30°24'35.0"N/ Long. (Engineers Point, Lat. 088°01'26.2"W, at For	SH/S/F&W	
Oyster Bay south of	the Intracoastal Water	way	SH/F&W
Coastal waters of the Alabama	e Gulf of Mexico contig	uous to the State of	SH/S/F&W
Intracoastal Waterway	Bon Secour Bay	Alabama Highway 59	F&W
Bon Secour River	Bon Secour Bay	10 feet above MSL	S/F&W
Boggy Branch	Bon Secour River	10 feet above MSL	S/F&W
Weeks Bay	Bon Secour Bay	Fish River	S/F&W ³
Magnolia River	Weeks Bay	10 feet above MSL	OAW/S/F&W
Fish River	Weeks Bay	10 feet above MSL	S/F&W
Turkey Branch	Fish River	10 feet above MSL	S/F&W
Waterhole Branch	Fish River	10 feet above MSL	S/F&W
Cowpen Creek	Fish River	10 feet above MSL	S/F&W
Polecat Creek	Fish River	10 feet above MSL	S/F&W
Point Clear Creek	MOBILE BAY	10 feet above MSL	F&W
Fly Creek	MOBILE BAY	10 feet above MSL	S/F&W
Rock Creek	MOBILE BAY	10 feet above MSL	F&W
D'Olive Creek	D'Olive Bay	Lake Forest Dam	F&W
East Fowl River	Fowl River	Its source	S/F&W
Fowl River	MOBILE BAY	10 feet above MSL	S/F&W

³The special designation of Outstanding National Resource Water applies to this segment.

Waterbody	From	То	Classification
Deer River and its forks	MOBILE BAY	Their sources	F&W
Dog River	MOBILE BAY	Halls Mill Creek	S/F&W
Dog River	Halls Mill Creek	Its source	F&W
Halls Mill Creek	Dog River	10 feet above MSL	F&W
Alligator Bayou	Dog River	10 feet above MSL	F&W
Rabbit Creek	Dog River	10 feet above MSL	F&W
Rattlesnake Bayou	Rabbit Creek	10 feet above MSL	F&W
Robinson Bayou	Dog River	Its source	F&W
Threemile Creek	MOBILE RIVER	Mobile Street	A&I
Industrial Canal	Threemile Creek	Its source	A&I
Chickasaw Creek	MOBILE RIVER	US Highway 43	LWF
Hog Bayou	Chickasaw Creek	Its source	F&W
Little Lagoon (Baldwin County)	In its entirety		SH/S/F&W
Bayou Sara	MOBILE RIVER	US Highway 43	S/F&W
Bayou Sara	US Highway 43	10 feet above MSL	F&W
Gunnison Creek	Bayou Sara	10 feet above MSL	S/F&W
Steele Creek	Gunnison Creek	10 feet above MSL	S/F&W
Norton Creek	Bayou Sara	10 feet above MSL	F&W

NOTE: Waters of the Mobile River-Mobile Bay Basin classified for SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS, SHELLFISH HARVESTING and/or FISH AND WILDLIFE in which natural conditions provide an appropriate habitat for shrimp and crabs are to be suitable for the propagation and harvesting of shrimp and crabs.

NON-COASTAL WATERS

Waterbody	From	То	Classification
MOBILE RIVER	I-65	Barry Steam Plant	F&W

Waterbody	From	То	Classification
MOBILE RIVER	Barry Steam Plant	Tensaw River	PWS/F&W
MOBILE RIVER	Tensaw River	Its source	F&W
Tensaw River	I-65	Briar Lake	OAW/S/F&W
Tensaw River	Briar Lake	Tensaw Lake	OAW/F&W
Briar Lake	Tensaw River	Tensaw Lake	OAW/F&W
Tensaw Lake	Tensaw River	Bryant Landing	OAW/F&W
Bon Secour River	10 feet above MSL	Its source	S/F&W
Boggy Branch	10 feet above MSL	Its source	S/F&W
Magnolia River	10 feet above MSL	Its source	OAW/S/F&W
Fish River	10 feet above MSL	Its source	S/F&W
Turkey Branch	10 feet above MSL	Its source	S/F&W
Waterhole Branch	10 feet above MSL	Its source	S/F&W
Cowpen Creek	10 feet above MSL	Its source	S/F&W
Fly Creek	10 feet above MSL	Its source	S/F&W
D'Olive Creek	Lake Forest Dam	Its source	F&W
Fowl River	10 feet above MSL	Its source	S/F&W
Polecat Creek	10 feet above MSL	Its source	S/F&W
Corn Branch	Fish River	Its source	F&W
Threemile Creek	Mobile Street	Its source	A&I
Gunnison Creek	10 feet above MSL	Its source	S/F&W
Steele Creek	10 feet above MSL	Its source	S/F&W
Chickasaw Creek	US Highway 43	University of Mobile	F&W
Chickasaw Creek	University of Mobile	Its source	S/F&W

Waterbody	From	То	Classification
Eight Mile Creek	Chickasaw Creek	City of Prichard's water supply intake	F&W
Eight Mile Creek	City of Prichard's water supply intake	US Highway 45	PWS/F&W
Eight Mile Creek	US Highway 45	Its source	F&W
Norton Creek	10 feet above MSL	Its source	F&W
Martin Branch	10 feet above MSL	Its source	F&W
Cold Creek	MOBILE RIVER	Cold Creek Dam	$F\&W^2$
Cold Creek	Cold Creek Dam	Its source	PWS/F&W

(12) THE PERDIDO RIVER BASIN

COASTAL WATERS

Waterbody	From	То	Classification
PERDIDO BAY and all connecting coves and bayous	Gulf of Mexico	Its source	SH/S/F&W
Intracoastal Waterway	Alabama Highway 59	Wolf Bay	F&W
Wolf Bay and all connecting coves and bayous	Intracoastal Waterway	Moccasin Bayou	OAW/SH/S/ F&W
Wolf Bay and all connecting coves and bayous	Moccasin Bayou	Its source	SH/S/F&W
Bay La Launch and all connecting coves and bayous	Wolf Bay	Arnica Bay	SH/S/F&W
Arnica Bay and all connecting coves and bayous	Bay La Launch	PERDIDO BAY	SH/S/F&W

²Due to naturally occurring conditions, quality in this segment may not always be commensurate with the classification assigned.

Waterbody	From	То	Classification
Miflin Creek	Wolf Bay	10 feet above MSL	S/F&W
Hammock Creek	Wolf Bay	10 feet above MSL	S/F&W
Palmetto Creek	PERDIDO BAY	10 feet above MSL	S/F&W
Spring Branch	PERDIDO BAY	10 feet above MSL	S/F&W
Soldier Creek	PERDIDO BAY	10 feet above MSL	S/F&W
PERDIDO RIVER	PERDIDO BAY	10 feet above MSL	F&W
Wolf Creek	Wolf Bay	10 feet above MSL	F&W
Sandy Creek	Wolf Bay	10 feet above MSL	S/F&W
Blackwater River	PERDIDO RIVER	10 feet above MSL	F&W
Styx River	PERDIDO RIVER	10 feet above MSL	F&W
Shelby Lakes	Within Gulf State Par	S/F&W	
Coastal waters of the Gulf of Mexico Contiguous to the State of			SH/S/F&W

Coastal waters of the Gulf of Mexico Contiguous to the State of SH/S/F&W Alabama

NOTE: Waters of the Perdido River Basin classified for SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS, SHELLFISH HARVESTING and/or FISH AND WILDLIFE in which natural conditions provide an appropriate habitat for shrimp and crabs are to be suitable for the propagation and harvesting of shrimp and crabs.

NON-COASTAL WATERS

Waterbody	From	То	Classification
PERDIDO RIVER	10 feet above MSL	Its source	F&W
Miflin Creek	10 feet above MSL	Its source	F&W
Hammock Creek	10 feet above MSL	Its source	S/F&W
Blackwater River	10 feet above MSL	Its source	F&W
Perdido Creek	PERDIDO RIVER	Its source	F&W
Brushy Creek	Alabama-Florida state line	Its source	F&W

Waterbody	From	То	Classification
Palmetto Creek	10 feet above MSL	Its source	S/F&W
Spring Branch	10 feet above MSL	Its source	S/F&W
Soldier Creek	10 feet above MSL	Its source	S/F&W
Negro Creek	Blackwater River	Its source	F&W
Rock Creek	Blackwater River	Its source	F&W
Styx River	10 feet above MSL	Hollinger Creek	F&W
Styx River	Hollinger Creek	Its source	S/F&W
Hollinger Creek	Styx River	Its source	F&W
Dyas Creek	PERDIDO RIVER	Its source	S/F&W

(13)

THE TALLAPOOSA RIVER BASIN

Waterbody	From	То	Classification
TALLAPOOSA RIVER	ALABAMA RIVER	US Highway 231	F&W
TALLAPOOSA RIVER	US Highway 231	Thurlow Dam	PWS/F&W
TALLAPOOSA RIVER (Thurlow Lake)	Thurlow Dam	Yates Dam	PWS/S/F&W
TALLAPOOSA RIVER (Yates Lake)	Yates Dam	Martin Dam	PWS/S/F&W
TALLAPOOSA RIVER (Lake Martin)	Martin Dam	US Highway 280	S/F&W ⁵
TALLAPOOSA RIVER (Lake Martin)	US Highway 280	Hillabee Creek	PWS/S/ F&W⁵
TALLAPOOSA RIVER (Lake Martin)	Hillabee Creek	Irwin Shoals	S/F&W⁵

⁵The special designation of Treasured Alabama Lake applies to this segment.

Waterbody	From	То	Classification
TALLAPOOSA RIVER	Irwin Shoals	R L Harris Dam	F&W
TALLAPOOSA RIVER (R L Harris Lake)	R L Harris Dam	Four miles upstream of Randolph County Road 88 (Lee Bridge)	S/F&W
TALLAPOOSA RIVER	Four miles upstream of Randolph County Road 88 (Lee Bridge)	One-half mile upstream of Cleburne County Road 36	F&W
TALLAPOOSA RIVER	One-half mile upstream of Cleburne County Road 36	Cleburne County Road 19	PWS/F&W
TALLAPOOSA RIVER	Cleburne County Road 19	Cane Creek	F&W
TALLAPOOSA RIVER	Cane Creek	Alabama-Georgia state line	OAW/F&W
Little Tallapoosa River (R L Harris Lake)	TALLAPOOSA RIVER	US Highway 431	S/F&W
Little Tallapoosa River (R L Harris Lake)	US Highway 431	Wolf Creek	PWS/S/F&W
Little Tallapoosa River	Wolf Creek	Alabama-Georgia state line	F&W
Line Creek	TALLAPOOSA RIVER	Its source	F&W
Old Town Creek	Line Creek	Its source	F&W
Cubahatchee Creek	TALLAPOOSA RIVER	Its source	S/F&W
Calebee Creek	TALLAPOOSA RIVER	Its source	F&W
Uphapee Creek	TALLAPOOSA RIVER	Its source	F&W
Bulger Creek	Uphapee Creek	Its source	PWS/F&W
Parkerson Mill Creek	Chewacla Creek	Its source	F&W

Waterbody	From	То	Classification
Chewacla Creek	Uphapee Creek	Chewacla State Park Lake (Moores Mill Creek)	F&W
Chewacla Creek	Chewacla State Park Lake (Moores Mill Creek)	Its source	PWS/F&W
Moores Mill Creek	Chewacla Creek (Dam at Chewacla State Park Lake)	Its source	S/F&W
Sougahatchee Creek	Yates Lake	Sougahatchee Lake Dam	F&W
Sougahatchee Creek	Sougahatchee Lake Dam	Its source	PWS/F&W
Pepperell Branch	Sougahatchee Creek	Its source	F&W
Head Creek	Sougahatchee Creek	Its source	F&W
Little Kowaliga Creek (Lake Martin)	Big Kowaliga Creek	Extent of reservoir	PWS/S/ F&W ⁵
Sandy Creek	Lake Martin	Its source	F&W
Chattasofka Creek	Sandy Creek	Its source	F&W
North Fork Sandy Creek	Sandy Creek	Its source	F&W
Little Sandy Creek	Sandy Creek	Norfolk Southern Railway	F&W
Little Sandy Creek	Norfolk Southern Railway	Its source	PWS/F&W
Manoy Creek (Lake Martin)	TALLAPOOSA RIVER	Extent of reservoir	PWS/S/ F&W ⁵
Elkahatchee Creek	Alabama Highway 63	Alabama Highway 22	PWS/F&W

⁵The special designation of Treasured Alabama Lake applies to this segment.

Waterbody	From	То	Classification
Elkahatchee Creek	Alabama Highway 22	Its source	F&W
Harold Creek	Elkahatchee Creek	Its source	F&W
Sugar Creek	Lake Martin	Its source	F&W
Coley Creek	Lake Martin	Its source	F&W
Hillabee Creek	Lake Martin	Oaktasasi Creek	F&W
Hillabee Creek	Oaktasasi Creek	Tallapoosa County Road 5	PWS/F&W
Hillabee Creek	Tallapoosa County Road 5	Its source	F&W
Oaktasasi Creek	Hillabee Creek	Its source	F&W
Whortleberry Creek	Oaktasasi Creek	Its source	F&W
Town Creek	Hillabee Creek	Its source	F&W
Hackney Creek	Town Creek	Its source	PWS/F&W
Chatahospee Creek	TALLAPOOSA RIVER	Its source	F&W
Mill Creek	Chatahospee Creek	Its source	F&W
Finley Creek	Mill Creek	Its source	PWS/F&W
High Pine Creek	TALLAPOOSA RIVER	US Highway 431	F&W
High Pine Creek	US Highway 431	Its source	PWS
Jones Creek	High Pine Creek	Its source	PWS
Unnamed tributary to Jones Creek northwest of Roanoke	Jones Creek	Its source	PWS
Graves Creek	High Pine Creek	Its source	F&W
Town Creek	High Pine Creek	Its source	F&W
Hutton Creek	TALLAPOOSA RIVER	Its source	F&W
Beaverdam Creek	TALLAPOOSA RIVER	Its source	F&W

Waterbody	From	То	Classification
Crooked Creek	TALLAPOOSA RIVER	Alabama Highway 9	F&W
Crooked Creek	Alabama Highway 9	Its source	PWS/F&W
Horsetrough Creek	Crooked Creek	Its source	F&W
Wedowee Creek	R L Harris Lake	Its source	F&W
Cahulga Creek	TALLAPOOSA RIVER	US Highway 78	F&W
Cahulga Creek	US Highway 78	Its source	PWS/F&W

(14) THE TENNESSEE RIVER BASIN

Waterbody	From	То	Classification
TENNESSEE RIVER (Pickwick Lake)	Alabama-Tennessee state line	Downstream end of Seven Mile Island	PWS/S/F&W
TENNESSEE RIVER (Pickwick Lake)	Downstream end of Seven Mile Island	Sheffield water intake	F&W
TENNESSEE RIVER (Pickwick Lake)	Sheffield water intake	Wilson Dam	PWS/F&W
TENNESSEE RIVER (Wilson Lake)	Wilson Dam	Wheeler Dam	PWS/S/F&W
TENNESSEE RIVER (Wheeler Lake)	Wheeler Dam	Five miles upstream of Elk River (RM 289.3)	PWS/S/F&W
TENNESSEE RIVER (Wheeler Lake)	Five miles upstream of Elk River (RM 289.3)	US Highway 31 (see Note 1 this basin)	S/F&W
TENNESSEE RIVER (Wheeler Lake)	US Highway 31	Flint Creek	PWS/S/F&W
TENNESSEE RIVER (Wheeler Lake)	Flint Creek	Cotaco Creek	S/F&W
TENNESSEE RIVER (Wheeler Lake)	Cotaco Creek	Indian Creek	PWS/S/F&W

Waterbody	From	То	Classification
TENNESSEE RIVER (Wheeler Lake)	Indian Creek	Flint River	PWS/F&W
TENNESSEE RIVER (Wheeler Lake)	Flint River	Guntersville Dam	S/F&W
TENNESSEE RIVER (Guntersville Lake)	Guntersville Dam	Upper end of Buck's Island (see Note 2 this basin)	PWS/S/F&W
TENNESSEE RIVER (Guntersville Lake)	Upper end of Buck's Island	Roseberry Creek	S/F&W
TENNESSEE RIVER (Guntersville Lake)	Roseberry Creek	Alabama-Tennessee state line (see Note 3 this basin)	PWS/S/F&W
Bear Creek	Alabama-Mississippi state line	Bear Creek Lake Dam	F&W
Bear Creek (Bear Creek Lake)	Bear Creek Lake Dam	Alabama Highway 187	PWS/S/F&W
Bear Creek	Alabama Highway 187	Upper Bear Creek Lake Dam	S/F&W
Bear Creek (Upper Bear Creek Lake)	Upper Bear Creek Lake Dam	Alabama Highway 243	PWS/S/F&W
Bear Creek	Alabama Highway 243	Its source	F&W
Cedar Creek	Bear Creek	Alabama-Mississippi state line	F&W
Cedar Creek	Alabama-Mississippi state line	Cedar Creek Lake Dam	F&W
Cedar Creek (Cedar Creek Lake)	Cedar Creek Lake Dam	Alabama Highway 24	PWS/S/F&W
Cedar Creek	Alabama Highway 24	Its source	F&W
Bear Creek (Pickwick Lake)	TENNESSEE RIVER	US Highway 72	S/F&W
Bear Creek	US Highway 72	Alabama-Mississippi state line	F&W

Waterbody	From	То	Classification
Second Creek	Pickwick Lake	Alabama-Tennessee state line	F&W
Cypress Creek	Pickwick Lake	City of Florence Water Treatment Plant	F&W
Cypress Creek	City of Florence Water Treatment Plant	Little Cypress Creek	PWS/F&W
Cypress Creek	Little Cypress Creek	Alabama-Tennessee state line	F&W
Little Cypress Creek	Cypress Creek	Alabama-Tennessee state line	F&W
Shoal Creek (Wilson Lake)	TENNESSEE RIVER	Indiancamp Creek	S/F&W
Shoal Creek	Indiancamp Creek	Alabama-Tennessee state line	F&W
Bluewater Creek (Wilson Lake)	TENNESSEE RIVER	US Highway 72	S/F&W
Bluewater Creek	US Highway 72	Alabama-Tennessee state line	F&W
Second Creek (Wheeler Lake)	TENNESSEE RIVER	Lauderdale County Road 92	S/F&W
Second Creek	Lauderdale County Road 92	Alabama-Tennessee state line	F&W
Elk River (Wheeler Lake)	TENNESSEE RIVER	Alabama Highway 99	S/F&W
Elk River	Alabama Highway 99	Alabama-Tennessee state line	PWS/F&W
Piney Creek	Wheeler Lake	Alabama-Tennessee state line	F&W
Limestone Creek	Wheeler Lake	Alabama-Tennessee state line	F&W

Waterbody	From	То	Classification
Flint River	Wheeler Lake	Big Cove Creek	F&W
Flint River	Big Cove Creek	Hurricane Creek	PWS/F&W
Flint River	Hurricane Creek	Alabama-Tennessee state line	F&W
Paint Rock River	Wheeler Lake	Its source	F&W
Larkin Fork	Paint Rock River	Its source	F&W
Estill Fork	Paint Rock River	Alabama-Tennessee state line	OAW/F&W
Hurricane Creek	Paint Rock River	Alabama-Tennessee state line	OAW/F&W
Crow Creek	Guntersville Lake	Alabama-Tennessee state line	F&W
Lookout Creek	Alabama-Georgia state line	Junction of East Fork Lookout Creek and West Fork Lookout Creek	S/F&W
Little Bear Creek (Franklin County)	Cedar Creek	Little Bear Creek Lake Dam	S/F&W
Little Bear Creek (Little Bear Creek Lake)	Little Bear Creek Lake Dam	Alabama Highway 187	PWS/S/F&W
Little Bear Creek (Franklin County)	Alabama Highway 187	Its source	S/F&W
Duncan Creek	Cedar Creek	Its source	PWS
Little Bear Creek	Bear Creek	Its source	PWS/S/F&W
Mud Creek	Cedar Creek	Its source	F&W
Flat Creek	Bear Creek	Its source	F&W
Cane Creek	Pickwick Lake	Its source	S/F&W
Little Bear Creek (Colbert County)	Pickwick Lake	Its source	S/F&W

Waterbody	From	То	Classification
Stinking Bear Creek	Little Bear Creek (Colbert County)	Its source	F&W
Spring Creek (Colbert County)	Pickwick Lake	Its source	F&W
Tuscumbia Spring (E	Big Spring)		PWS
Cox Creek	Cypress Creek	Its source	F&W
Pond Creek	Wilson Lake	Its source	A&I
Town Creek	Wilson Lake	Its source	F&W
Big Nance Creek	Wilson Lake	Its source	F&W
Muddy Fork	Big Nance Creek	Crow Branch	A&I
Crow Branch	Muddy Fork	Its source	A&I
Clear Fork	Big Nance Creek	Its source	F&W
Sinking Creek	Clear Fork	Its source	PWS/F&W
First Creek	Wheeler Lake	Its source	S/F&W
Spring Creek (Lawrence County)	Wheeler Lake	Its source	F&W
Swan Creek (Wheeler Lake)	TENNESSEE RIVER	Extent of reservoir	F&W
Swan Creek	Wheeler Lake	Its source	F&W
Town Creek (Athens)	Swan Creek	Its source	F&W
Flint Creek (Wheeler Lake)	TENNESSEE RIVER	CSX Railway	F&W
Flint Creek	CSX Railway	Alabama Highway 36	PWS/F&W
Flint Creek	Alabama Highway 36	Shoal Creek	LWF ⁴

⁴For the purpose of establishing effluent limitations pursuant to chapter 335-6-6 of the Department's regulations, the minimum 7-day low flow that occurs once in 10 years (7Q₁₀) shall be the basis for applying the chronic aquatic life criteria.

Waterbody	From	То	Classification
Flint Creek	Shoal Creek	Its source	F&W
Shoal Creek	Flint Creek	Its source	F&W
Cotaco Creek	Wheeler Lake	Its source	S/F&W
Mill Pond Creek	Cotaco Creek	Junction with Gilliam Creek	F&W
Gilliam Creek	Mill Pond Creek	Its source	F&W
Bradford Creek	Barren Fork Creek	Its source	F&W
Indian Creek (Wheeler Lake)	TENNESSEE RIVER	Extent of reservoir	F&W
Indian Creek	Wheeler Lake	Its source	F&W
Huntsville Spring Branch	Indian Creek	Its source	F&W
Aldridge Creek	Wheeler Lake	Its source	F&W
Hurricane Creek	Flint River	Its source	F&W
Sand Branch	Hurricane Creek	Its source	F&W
Short Creek	Guntersville Lake	Scarham Creek	PWS/F&W
Short Creek	Scarham Creek	Its source	F&W
Drum Creek	Short Creek	Its source	F&W
East Fork of Drum Creek	Drum Creek	Its source	F&W
Turkey Creek	Short Creek	Its source	F&W
Town Creek (DeKalb County)	Guntersville Lake	Its source	F&W
South Sauty Creek	Guntersville Lake	Its source	S/F&W
North Sauty Creek (Guntersville Lake)	TENNESSEE RIVER	Extent of reservoir	PWS
North Sauty Creek	Guntersville Lake	Its source	PWS

Waterbody	From	То	Classification
Roseberry Creek	Guntersville Lake	Its source	F&W
Coon Creek (Guntersville Lake)	TENNESSEE RIVER	Extent of reservoir	S/F&W
Coon Creek	Guntersville Lake	Its source	S/F&W
Flat Rock Creek	Coon Creek	Its source	S/F&W
Widows Creek	TENNESSEE RIVER	Its source	S/F&W
Long Island Creek (Guntersville Lake)	TENNESSEE RIVER	Extent of reservoir	PWS/S/F&W
Long Island Creek	Guntersville Lake	Miller Creek	PWS/S/F&W
Long Island Creek	Miller Creek	Its source	S/F&W
Turkey Creek	Clear Fork	Its source	PWS/F&W
Bengis Creek	Town Creek	Its source	F&W

NOTE 1. That portion of Wheeler Lake in the immediate vicinity of the discharge from the City of Decatur's sewage treatment plant is not considered suitable for SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS.

NOTE 2. Those portions of Guntersville Lake in the immediate vicinity of discharges from the City of Guntersville's sewage treatment plants are not considered suitable for SWIMMING and OTHER WHOLE BODY WATER-CONTACT SPORTS nor for sources of PUBLIC WATER SUPPLY.

NOTE 3. That portion of Guntersville Lake in the immediate vicinity of the discharge of sewage from the City of Bridgeport is not considered suitable for use as a source of PUBLIC WATER SUPPLY nor for SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS.

(15) **THE TOMBIGBEE RIVER BASIN**

Waterbody	From	То	Classification
TOMBIGBEE RIVER	MOBILE RIVER	One-half mile downstream from Norfolk Southern Railway Crossing	F&W

Waterbody	From	То	Classification
TOMBIGBEE RIVER	One-half mile downstream from Norfolk Southern Railway Crossing	Jackson Creek	PWS/S/F&W
TOMBIGBEE RIVER	Jackson Creek	Coffeeville Lock and Dam	F&W
TOMBIGBEE RIVER (Coffeeville Lake)	Coffeeville Lock and Dam	Beach Bluff (River Mile 141)	S/F&W
TOMBIGBEE RIVER (Coffeeville Lake)	Beach Bluff (River Mile 141)	One-half mile downstream from Alabama Highway 114	F&W1
TOMBIGBEE RIVER (Coffeeville Lake)	One-half mile downstream from Alabama Highway 114	Three miles upstream from Alabama Highway 114	PWS/F&W ¹
TOMBIGBEE RIVER (Coffeeville Lake)	Three miles upstream from Alabama Highway 114	Demopolis Lock and Dam	F&W ¹
TOMBIGBEE RIVER (Demopolis Lake)	Demopolis Lock and Dam	BLACK WARRIOR RIVER	S/F&W
Okatuppa Creek	Coffeeville Lake	Alabama-Mississippi state line	F&W
Bogueloosa Creek	Okatuppa Creek	Its source	F&W
Tuckabum Creek	Coffeeville Lake	Alabama-Mississippi state line	F&W
Yantley Creek	Tuckabum Creek	Alabama-Mississippi state line	F&W
Sucarnoochee River	Coffeeville Lake	US Highway 11	F&W
Sucarnoochee River	US Highway 11	Miuka Creek	PWS/S/F&W

¹Applicable dissolved oxygen level below existing impoundments is 4.0 mg/l.

Waterbody	From	То	Classification
Sucarnoochee River	Miuka Creek	Alabama-Mississippi state line	F&W
Alamuchee Creek	Sucarnoochee River	Alabama-Mississippi state line	F&W
Toomsuba Creek	Alamuchee Creek	Norfolk Southern Railway	F&W
Toomsuba Creek	Norfolk Southern Railway	Alabama-Mississippi state line	PWS/F&W
Bilbo Creek	TOMBIGBEE RIVER	Its source	S/F&W
Bates Creek	Bilbo Creek	Its source	S/F&W
Lewis Creek	TOMBIGBEE RIVER	Its source	S/F&W
Bassetts Creek (Washington County)	TOMBIGBEE RIVER	Its source	S/F&W
Little Bassetts Creek (Washington County)	Bassetts Creek (Washington County)	Its source	F&W
Miles Creek	Little Bassetts Creek (Washington County)	Its source	F&W
Bassett Creek (Clarke County)	TOMBIGBEE RIVER	Its source	F&W
James Creek	Bassett Creek (Clarke County)	Its source	F&W
Jackson Creek	TOMBIGBEE RIVER	Its source	F&W
Salitpa Creek	TOMBIGBEE RIVER	Its source	S/F&W
Santa Bogue Creek	TOMBIGBEE RIVER	Its source	S/F&W
Turkey Creek	Coffeeville Lake	Its source	S/F&W
Bashi Creek	Coffeeville Lake	Its source	S/F&W
Wahalak Creek	Coffeeville Lake	Its source	F&W

Waterbody	From	То	Classification
Tishlarka Creek	Wahalak Creek	Its source	F&W
Horse Creek	Coffeeville Lake	Its source	S/F&W
Beaver Creek	Coffeeville Lake	Its source	S/F&W
Kinterbish Creek	Coffeeville Lake	Its source	S/F&W
Chickasaw Bogue	Coffeeville Lake	Its source	F&W
Sycamore Creek	Chickasaw Bogue	Its source	F&W
Unnamed tributary to Toomsuba Creek (Lake Louise)	Toomsuba Creek	Its source	PWS
TOMBIGBEE RIVER (Demopolis Lake)	BLACK WARRIOR RIVER	Cobb Creek	S/F&W
TOMBIGBEE RIVER (Demopolis Lake)	Cobb Creek	Heflin Lock and Dam	F&W
TOMBIGBEE RIVER (Gainesville Lake)	Heflin Lock and Dam	Bevill Lock and Dam	S/F&W
TOMBIGBEE RIVER (Aliceville Lake)	Bevill Lock and Dam	Alabama-Mississippi state line	S/F&W
Noxubee River	Lake Demopolis	Alabama-Mississippi state line	F&W
Bodka Creek	Noxubee River	Alabama-Mississippi state line	F&W
Yellow Creek	At Alabama-Mississip	pi state line	PWS
Yellow Creek	Alabama-Mississippi state line	Its source	F&W
Buttahatchee River	Alabama-Mississippi state line	US Highway 278 one mile east of Hamilton	F&W
Buttahatchee River	US Highway 278 one mile east of Hamilton	US Highway 278 seven miles east of Hamilton	PWS/F&W

Waterbody	From	То	Classification
Buttahatchee River	US Highway 278 seven miles east of Hamilton	Lake Buttahatchee Dam	F&W
Buttahatchee River (Lake Buttahatchee)	Lake Buttahatchee Dam	Extent of reservoir	S
Buttahatchee River	Lake Buttahatchee	Its source	F&W
Bull Mountain Creek	Alabama-Mississippi state line	Its source	F&W
Sipsey Creek	Alabama-Mississippi state line	Its source	F&W
Luxapallila Creek	At Alabama-Mississip	opi state line	PWS
Luxapallila Creek	Alabama-Mississippi state line	Fayette County Road 37	F&W
Luxapallila Creek	Fayette County Road 37	Kirkland Road	PWS/F&W
Luxapallila Creek	Kirkland Road	US Highway 78	F&W
Luxapallila Creek	US Highway 78	Its source	PWS/F&W
Sipsey River	Gainesville Lake	US Highway 43	F&W
Sipsey River	US Highway 43	Alabama Highway 102	PWS/F&W
Sipsey River	Alabama Highway 102	Its source	F&W
New River	Sipsey River	Its source	F&W
Little New River	Sipsey River	Its source	F&W
Lubbub Creek	Gainesville Lake	Its source	F&W
Bear Creek	Lubbub Creek	Its source	F&W
Little Bear Creek	Bear Creek	Its source	F&W
Coal Fire Creek	Aliceville Lake	Its source	S/F&W
Bogue Creek	Buttahatchee River	Its source	F&W

Waterbody	From	То	Classification
Beaver Creek	Buttahatchee River	US Highway 78	F&W
Beaver Creek	US Highway 78	Its source	PWS/F&W
Purgatory Creek	Beaver Creek	US Highway 278	F&W
Purgatory Creek	US Highway 278	Its source	PWS/F&W
Camp Creek	Buttahatchee River	Its source	F&W
East Branch Luxapallila Creek	Luxapallila Creek	Its source	PWS/F&W
Moore Creek	West Branch Buttahatchee River	Its source	F&W

(16) THE YELLOW RIVER BASIN

Waterbody	From	То	Classification
YELLOW RIVER	Alabama-Florida state line	Its source	F&W
Pond Creek	Alabama-Florida state line	Its source	F&W
Big Creek	Alabama-Florida state line	Its source	F&W
Horsehead Creek	Alabama-Florida state line	Its source	F&W
Fleming Creek	Alabama-Florida state line	Its source	F&W
Lake Jackson	Within Florala and north of Alabama- Florida state line		S/F&W
Five Runs Creek	YELLOW RIVER	Its source	F&W
Indian Creek	YELLOW RIVER	Its source	F&W
Lightwood Knot Creek	YELLOW RIVER	Frank Jackson Dam	F&W

Waterbody	From	То	Classification
Lightwood Knot Creek (Lake Frank Jackson)	Frank Jackson Dam	Extent of reservoir	S/F&W
Lightwood Knot Creek	Lake Frank Jackson	Its source	F&W
Cameron Creek	Lightwood Knot Creek	Its source	F&W
Bay Branch	Five Runs Creek	Its source	F&W
Blue Lake	Within Conecuh National Forest		S/F&W
Open Pond	Within Conecuh National Forest		S/F&W
Dowdy Pond	Within Conecuh National Forest		S/F&W

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