

**Department of State
Division of Publications**

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Sequence Number: 10-18-09
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File Date: 10/21/2009

Notice of Rulemaking Hearing

Hearings will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, Tennessee Code Annotated, Section 4-5-204. For questions and copies of the notice, contact the person listed below.

Agency/Board/Commission:	Environment and Conservation
Division:	Water Pollution Control
Contact Person:	Gregory Denton
Address:	6 th Floor, L&C Annex 401 Church Street Nashville, Tennessee 37243-1534
Phone:	(615) 532-0699
Email:	Gregory.Denton@tn.gov

Any Individuals with disabilities who wish to participate in these proceedings (to review these filings) and may require aid to facilitate such participation should contact the following at least 10 days prior to the hearing:

ADA Contact:	ADA Coordinator
Address:	12 th Floor L&C Tower 401 Church Street Nashville, Tennessee 37243
Phone:	1-866-253-5827 (toll free) or (615) 532-0200 Hearing impaired callers may use the TN Relay Service at 1-800-848-0298.
Email:	Beverly.Evans@state.tn.us

Hearing Location(s) (for additional locations, copy and paste table)

Address 1:	Ruth Neff Conference Room 17 th Floor, L & C Tower
Address 2:	401 Church Street
City:	Nashville, Tennessee
Zip:	37243
Hearing Date :	12/15/09
Hearing Time:	1:30 p.m. <input checked="" type="checkbox"/> CST <input type="checkbox"/> EST

Address 1:	Chattanooga State Office Building 1 st Floor Auditorium
Address 2:	540 McCallie Avenue
City:	Chattanooga, Tennessee
Zip:	37402-2013
Hearing Date :	01/05/10
Hearing Time:	10:00 a.m. <input type="checkbox"/> CST <input checked="" type="checkbox"/> EST

Address 1:	Johnson City Environmental Field Office Main Conference Room
Address 2:	2305 Silverdale Road
City:	Johnson City, Tennessee
Zip:	37601-2162

Hearing Date :	01/06/10		
Hearing Time:	2:00 p.m.	<input type="checkbox"/> CST	<input checked="" type="checkbox"/> EST

Address 1:	Knoxville Environmental Field Office Main Conference Room		
Address 2:	2700 Middlebrook Pike		
City:	Knoxville, Tennessee		
Zip:	37921-5602		
Hearing Date :	01/07/10		
Hearing Time:	2:00 p.m.	<input type="checkbox"/> CST	<input checked="" type="checkbox"/> EST

Address 1:	Memphis Environmental Field Office* Main Conference Room * The Memphis Environmental Field Office is moving to a new location in early 2010. However, the exact date of this relocation is unknown. If you plan on attending this meeting, call (901) 368-7939 to confirm the location.		
Address 2:	Suite E-645 Perimeter Park 2510 Mount Moriah Road		
City:	Memphis, Tennessee		
Zip:	38115-1520		
Hearing Date :	01/13/10		
Hearing Time:	1:30 p.m.	<input checked="" type="checkbox"/> CST	<input type="checkbox"/> EST

Address 1:	Jackson Environmental Field Office Main Conference Room		
Address 2:	1625 Hollywood Drive		
City:	Jackson, Tennessee		
Zip:	38305-4316		
Hearing Date :	01/14/10		
Hearing Time:	10:00 a.m.	<input checked="" type="checkbox"/> CST	<input type="checkbox"/> EST

Additional Hearing Information:

The Tennessee Water Quality Control Board has initiated the rulemaking process to make revisions to Tennessee's General Water Quality Criteria and Stream-use Classifications for Surface Waters. The federal Clean Water Act requires that these rules be reviewed and revised no less often than every three years. These regulations classify surface waters for one or more of seven designated uses and establish narrative or numerical criteria to protect water quality for each use. They also have specific provisions for the protection of high quality waters.

An initial set of draft rules has been prepared for public review and comment. Copies of these initial draft rules are available for review at the Tennessee Department of Environment and Conservation's (TDEC's) Environmental Field Offices located as follows:

Memphis Environmental Field Office
Suite E-645, Perimeter Park
2510 Mount Moriah Road
Memphis, TN 38115-1520
(901) 368-7939/1-888-891-8332

Cookeville Environmental Field Office
1221 South Willow Avenue
Cookeville, TN 38506
(931) 432-4015/ 1-888-891-8332

Jackson Environmental Field Office
1625 Hollywood Drive
Jackson, TN 38305
(731) 512-1300/1-888-891-8332

Chattanooga Environmental Field Office
Suite 550- State Office Building
540 McCallie Avenue
Chattanooga, TN 37402-2013
(423) 634-5745/1-888-891-8332

Columbia Environmental Field Office
1421 Hampshire Pike
Columbia, TN 38401
(931) 380-3371/ 1-888-891-8332

Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921-5602
(865) 594-6035/1-888-891-8332

Nashville Environmental Field Office
 711 R. S. Gass Blvd.
 Nashville, TN 37243-1550
 (615) 687-7000/1-888-891-8332

Johnson City Environmental Field Office
 2305 Silverdale Road
 Johnson City, TN 37601-2162
 (423) 854-5400/1-888-891-8332

The "DRAFT" rules may also be accessed for review using <http://state.tn.us/environment/wpc/ppo>.

Draft copies are also available for review at the Nashville Central Office (see address below).

Tennessee Department of Environment and Conservation
 Division of Water Pollution Control
 6th Floor, L & C ANNEX
 401 Church Street
 Nashville, TN 37243-1534
 (615) 532-0633

Office hours for the Division's offices are from 8:00 AM to 4:30 PM, Monday through Friday (excluding holidays).

Oral or written comments are invited at the hearing. In addition, written comments may be submitted prior to or after the public hearing to: Division of Water Pollution Control; Tennessee Department of Environment and Conservation; Attention: Gregory Denton; 7th Floor, L & C ANNEX; 401 Church Street; Nashville, Tennessee 37243-1534; telephone 615-532-0699 or FAX 615-532-0686. However, such written comments must be received by the Division by 4:30 PM CDT, January 29, 2010, in order to assure consideration. For further information, contact Gregory Denton at the above address or telephone number.

Revision Type (check all that apply):

- Amendment
 New
 Repeal

Rule(s) (ALL chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables. Please enter only **ONE** Rule Number/RuleTitle per row.)

Chapter Number	Chapter Title
1200-04-03	General Water Quality Criteria
Rule Number	Rule Title
1200-04-03-.01	Tennessee Water Quality Control Board
1200-04-03-.02	General Considerations
1200-04-03-.03	Criteria For Water Uses
1200-04-03-.04	Definitions
1200-04-03-.05	Interpretation of Criteria
1200-04-03-.06	Tennessee Antidegradation Statement
1200-04-03-.07	Ground Water Classification
1200-04-03-.08	Criteria
1200-04-03-.09	Site Specific Impaired Classification Petition Process
1200-04-03-.10	Remediation of Ground Water or Perched Water
1200-04-03-.11	Classified Site Specific Impaired Ground Water and Respective Criteria
1200-04-03-.12	Reporting Requirement

Chapter Number	Chapter Title
1200-04-04	Use Classifications For Surface Waters
Rule Number	Rule Title
1200-04-04-.01	Memphis Area Basin
1200-04-04-.02	Hatchie River Basin
1200-04-04-.03	Obion-Forked Deer Basin
1200-04-04-.04	Tennessee River Basin – Western Valley

1200-04-04-.05	Duck River Basin
1200-04-14-.06	Elk River Basin (including Shoal Creek)
1200-04-04-.07	Lower Tennessee River Basin (including Conasauga Basin)
1200-04-04-.08	Upper Tennessee River Basin
1200-04-04-.09	Clinch River Basin
1200-04-04-.10	French Broad River Basin
1200-04-04-.11	Holston River Basin
1200-04-04-.12	Lower Cumberland River Basin
1200-04-04-.13	Upper Cumberland River Basin
1200-04-04-.14	Barren River Basin

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to <http://state.tn.us/sos/rules/1360/1360.htm>)

Chapter 1200-04-03
General Water Quality Criteria

Amendments

Chapter 1200-04-03 General Water Quality Criteria is deleted in its entirety and replaced with the following so that, as amended, Chapter 1200-04-03 shall read as follows:

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1200-04-03-.01 Tennessee Water Quality Board	1200-04-03-.09 Site Specific Impaired Classification Petition Process
1200-04-03-.02 General Considerations	1200-04-03-.10 Remediation of Ground Water or Perched Water
1200-04-03-.03 Criteria For Water Uses	1200-04-03-.11 Classified Site Specific Impaired Ground Water and Respective Criteria
1200-04-03-.04 Definitions	1200-04-03-.12 Reporting Requirement
1200-04-03-.05 Interpretation of Criteria	
1200-04-03-.06 Tennessee Antidegradation Statement	
1200-04-03-.07 Ground Water Classification	
1200-04-03-.08 Criteria	

1200-04-03-.01 Tennessee Water Quality Control Board

The Water Quality Control Act, T.C.A., § 69-3-101, et seq., makes it the duty of the Water Quality Control Board to study and investigate all problems concerned with the pollution of the Waters of the State and with its prevention, abatement, and control; and to establish such standards of quality for any Waters of the State in relation to their reasonable and necessary use as the Board shall deem to be in the public interest; and establish general policies relating to pollution as the Board shall deem necessary to accomplish the purposes of the Act. The following general considerations and criteria shall be used to determine the permissible conditions of waters with respect to pollution and preventative or corrective measures required to control pollution in various waters or in different sections of the same waters.

Authority: T.C.A. §§ 4-5-201 et seq., § 69-3-105.

1200-04-03-.02 General Considerations.

- (1) Tennessee water quality standards shall consist of the General Water Quality Criteria and the Antidegradation Statement found in Rule 1200-04-03, and the Use Classifications for Surface Waters found in Rule 1200-04-04.
- (2) Waters have many uses which in the public interest are reasonable and necessary. Such uses include: sources of water supply for domestic and industrial purposes; propagation and maintenance of fish and other aquatic life; recreation in and on the waters including the safe consumption of fish and shellfish; livestock watering and irrigation; navigation; generation of power; propagation and maintenance of wildlife; and the enjoyment of scenic and aesthetic qualities of waters.
- (3) The rigid application of uniform water quality is not desirable or reasonable because of the varying uses of such waters. The assimilative capacity of a stream for sewage and waste varies depending upon

various factors and including the following: volume of flow, depth of channel, the presence of falls or rapids, rate of flow, temperature, natural characteristics, and the nature of the stream.

- (4) In order to permit the reasonable and necessary uses of the Waters of the State, existing pollution should be corrected as rapidly as practicable, and future pollution prevented through the best available technology economically achievable or that greater level of technology necessary to meet water quality standards; i.e., modeling and stream survey assessments, treatment plants or other control measures.
- (5) Since all Waters of the State are classified for more than one use, the most stringent criteria will be applicable. In cases where criteria for protection of more than one use apply at different stream flows (e.g., aquatic life versus recreation), the most protective will also be applicable.
- (6) Waters identified as wet weather conveyances according to the definition found in 1200-04-03-.04 (4), shall be protective of humans and wildlife that may come in contact with them and shall not adversely affect the quality of downstream waters. Applicable water quality standards will be maintained downstream of wet weather conveyances.
- (7) Where general water quality criteria are applied on a regional, ecoregional, or subcoregional basis, these criteria will be considered to apply to a stream if eighty percent of its watershed or catchment is contained within the unit upon which the criterion is based.
- (8) All fish and aquatic life metals criteria are expressed as total recoverable, except cadmium, copper, lead, nickel, silver, and zinc which are expressed as dissolved. Translators will be used to convert the dissolved fraction into a total recoverable permit limit. One of three approaches to metals translation will be used: (1) translator is the same as the conversion factor, (2) translator is based on relationships derived from STORET data, (3) a site-specific translator is developed. Where available, a site-specific translator is preferred. For assessing whether criteria for cadmium, copper, lead, nickel, silver, and zinc are exceeded by ambient water quality conditions, the dissolved criteria will also be translated in order to allow direct comparison to the ambient data, if total recoverable.
- (9) Site-specific criteria studies may be conducted on any appropriate fish and aquatic life criteria.
 - (a) Site-specific criteria studies based on a Water Effects Ratio (WER) calculated from the documented toxicity of a parameter in the stream in which it will be introduced may supersede the adopted criteria at a site. The Division shall approve a site-specific criteria developed by others provided that the WER methodology [Interim Guidance on Determination and Use of Water-effect Ratios for Metals (EPA-823-B-94-001)] is used, both the study plan and results are approved by the department, and the U.S. Environmental Protection Agency has concurred with the final site specific criterion value(s).
 - (b) Any site specific criterion based on methodologies other than the WER methodology which recalculate specific criterion, such as the Resident Species Method or the Recalculation Method, must be adopted as a revision to Tennessee water quality standards into Chapter 1200-04-03, and following EPA approval, can be used for Clean Water Act purposes.

References on this subject include, but are not limited to: Technical Support Document for Water Quality-based Toxics Control (EPA - 505/2-90-001); Technical Guidance Manual for Performing Waste Load Allocations: Book VIII (EPA/600/6-85/002a/002b/002c); MinteqA2, An Equilibrium Metal Speciation Model (EPA/600/3-87/012); Water Quality Standards Handbook, Second Edition (EPA-823-B-93-002); The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit From a Dissolved Criteria (EPA-823-B-96-007); Interim Guidance on Determination and Use of Water-effect Ratios for Metals (EPA-823-B-94-001).

- (10) Interpretation and application of narrative criteria shall be based on available scientific literature and EPA guidance and regulations.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.03 Criteria For Water Uses.

(1) Domestic Water Supply.

- (a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.
- (b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.
- (c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not appreciably impair the usefulness of the water as a source of domestic water supply.
- (d) Total Dissolved Solids - The total dissolved solids shall at no time exceed 500 mg/l.
- (e) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water as a source of domestic water supply.
- (f) Turbidity or Color - There shall be no turbidity or color in amounts or characteristics that cannot be reduced to acceptable concentrations by conventional water treatment processes (See definition).
- (g) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of impoundments where stratification occurs will be measured at a depth of 5 feet or mid-depth, whichever is less, and the temperature in flowing streams shall be measured at mid-depth.
- (h) Coliform - The concentration of the E. coli group shall not exceed 630 per 100 ml as a geometric mean based on a minimum of 5 samples collected from a given sampling site over a period of not more than 30 consecutive days with individual samples being collected at intervals of not less than 12 hours. For the purpose of determining the geometric mean, individual samples having an E. coli group concentration of less than 1 per 100 ml shall be considered as having a concentration of 1 per 100 ml.
- (i) Taste or Odor - The waters shall not contain substances which will result in taste or odor that prevent the production of potable water by conventional water treatment processes.
- (j) Toxic Substances - The waters shall not contain toxic substances, whether alone or in combination with other substances, which will produce toxic conditions that materially affect the health and safety of man or animals, or impair the safety of conventionally treated water supplies. Available references include, but are not limited to: Quality Criteria for Water (Section 304(a) of Public Law 92-500 as amended); Federal Regulations under Section 307 of Public Law 92-500 as amended; and Federal Regulations under Section 1412 of the Public Health Service Act as amended by the Safe Drinking Water Act, (Public Law 93-523). Limits set for some of the most commonly occurring toxic substances are as follows:

Compound	Criteria (ug/L)	Compound	Criteria (ug/L)
Antimony	6	Diquat	20
Arsenic	10	Endothall	100
Beryllium	4	Glyphosate	700
Barium	2000	Hexachlorobenzene	1
Cadmium	5	Hexachlorocyclopentadiene	50
Chromium, total	100	Oxamyl (Vydate)	200
Lead	5	Picloram	500
Cyanide (as free cyanide)	200	Simazine	4
Mercury	2	2,3,7,8 TCDD (Dioxin)	0.00003
Nickel	100	Benzene	5
Selenium	50	Carbon tetrachloride	5

Thallium	2	1,2-Dichloroethane	5
Alachlor	2	1,1-Dichloroethylene	7
Atrazine	3	1,1,1-Trichloroethane	200
Carbofuran	40	Trichloroethylene	5
Chlordane	2	Vinyl chloride	2
Dibromo chloropropane	0.2	para-Dichlorobenzene	75
2,4 Dichlorophenoxyacetic	70	cis 1,2-Dichloroethylene	70
Ethylene dibromide	0.05	1,2-Dichloropropane	5
Heptachlor	0.4	Ethyl benzene	700
Heptachlor epoxide	0.2	Monochlorobenzene	100
Lindane	0.2	ortho-Dichlorobenzene	600
Methoxychlor	40	Styrene	100
Polychlorinated biphenyls	0.5	Tetrachloroethylene	5
2,4,5 Trichloropheno-		Toluene	1000
xyrioponic acid	50	trans 1,2-Dichloroethylene	100
Pentachlorophenol	1	Xylenes, total	10000
Benzo(a)pyrene	0.2	Dichloromethane	5
Dalapon	200	1,2,4-Trichlorobenzene	70
Di(2-ethylhexyl) adipate	400	1,1,2-Trichloroethane	5
Di(2-ethylhexyl) phthalate	6	Endrin	2.0
Dinoseb	7	Toxaphene	3

(k) Other Pollutants - The waters shall not contain other pollutants in quantities that may be detrimental to public health or impair the usefulness of the water as a source of domestic water supply.

(2) Industrial Water Supply.

- (a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.
- (b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.
- (c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not appreciably impair the usefulness of the water as a source of industrial water supply.
- (d) Total Dissolved Solids - The total dissolved solids shall at no time exceed 500 mg/l.
- (e) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water as a source of industrial water supply.
- (f) Turbidity or Color - There shall be no turbidity or color in amounts or characteristics that cannot be reduced to acceptable concentrations by conventional water treatment processes.
- (g) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of impoundments where stratification occurs will be measured at a depth of 5 feet or mid- depth, whichever is less, and the temperature in flowing streams shall be measured at mid-depth.
- (h) Taste or Odor - The waters shall not contain substances which will result in taste or odor that would prevent the use of the water for industrial processing.
- (i) Toxic Substances - The waters shall not contain toxic substances whether alone or in combination with other substances, which will adversely affect industrial processing.
- (j) Other Pollutants - The waters shall not contain other pollutants in quantities that may adversely

affect the water for industrial processing.

(3) Fish and Aquatic Life.

(a) Dissolved Oxygen - The dissolved oxygen shall not be less than 5.0 mg/l with the following exceptions.

1. In streams identified as trout streams, including tailwaters, dissolved oxygen shall not be less than 6.0 mg/L.
2. The dissolved oxygen concentration of trout waters designated as supporting a naturally reproducing population shall not be less than 8.0 mg/L. (Tributaries to trout streams or naturally reproducing trout streams should be considered to be trout streams or naturally reproducing trout streams, unless demonstrated otherwise. Additionally, all streams within the Great Smoky Mountains National Park should be considered naturally reproducing trout streams.)
3. In wadeable streams in subecoregion 73a, dissolved oxygen levels shall not be less than a daily average of 5.0 mg/L with a minimum dissolved oxygen level of 4.0 mg/L.
4. The dissolved oxygen level of streams in ecoregion 66 (Blue Ridge Mountains) not designated as naturally reproducing trout streams shall not be less than 7.0 mg/L.

Substantial and/or frequent variations in dissolved oxygen levels, including diurnal fluctuations, are undesirable if caused by man-induced conditions. Diurnal fluctuations shall not be substantially different than the fluctuations noted in reference streams in that region.

In lakes and reservoirs, the dissolved oxygen concentrations shall be measured at mid-depth in waters having a total depth of ten feet or less, and at a depth of five feet in waters having a total depth of greater than ten feet and shall not be less than 5.0 mg/L.

- (b) pH - The pH value shall not fluctuate more than 1.0 unit over a period of 24 hours and shall not be outside the following ranges: 6.0 – 9.0 in wadeable streams and 6.5 – 9.0 in larger rivers, lakes, reservoirs, and wetlands.
- (c) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life.
- (d) Turbidity, Total Suspended Solids, or Color - There shall be no turbidity, total suspended solids, or color in such amounts or of such character that will materially affect fish and aquatic life. In wadeable streams, suspended solid levels over time should not be substantially different than conditions found in reference streams.
- (e) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of recognized trout waters shall not exceed 20°C. There shall be no abnormal temperature changes that may affect aquatic life unless caused by natural conditions. The temperature in flowing streams shall be measured at mid-depth.

The temperature of impoundments where stratification occurs will be measured at mid-depth in the epilimnion (see definition in 1200-04-03-.04) for warm water fisheries and mid-depth in the hypolimnion (see definition in 1200-04-03-.04) for cold water fisheries. In the case of large impoundments (100 acres or larger) subject to stratification and recognized as trout waters, the temperature of the hypolimnion shall not exceed 20°C.

A successful demonstration as determined by the state conducted for thermal discharge limitations under Section 316(a) of the Clean Water Act, (33 U.S.C. §1326), shall constitute compliance with this section.

- (f) Taste or Odor - The waters shall not contain substances that will impart unpalatable flavor to fish or result in noticeable offensive odors in the vicinity of the water or otherwise interfere with fish or aquatic life. References include, but are not limited to: Quality Criteria for Water (section 304(a) of Public Law 92-500 as amended).
- (g) Toxic Substances - The waters shall not contain substances or a combination of substances including disease - causing agents which, by way of either direct exposure or indirect exposure through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), physical deformations, or restrict or impair growth in fish or aquatic life or their offspring. References on this subject include, but are not limited to: Quality Criteria for Water (Section 304(a) of Public Law 92-500 as amended); Federal Regulations under Section 307 of Public Law 92-500 as amended. The following criteria are for the protection of fish and aquatic life:

Compound	Criterion Maximum Concentration ug/l (CMC)	Criterion Continuous Concentration ug/l (CCC)
Arsenic (III)*	340	150
Cadmium**	2.0	0.25
Chromium, III**	570	74
Chromium, VI*	16	11
Copper**	13	9.0
Lead**	65	2.5
Mercury*	1.4	0.77
Nickel**	470	52
Selenium	***	5
Silver**	3.2	---
Zinc**	120	120
Cyanide****	22	5.2
Chlorine (TRC)	19	11
Pentachlorophenol*****	19	15
Aldrin	3.0	---
g-BHC – Lindane	0.95	---
Chlordane	2.4	0.0043
4-4'-DDT	1.1	0.001
Dieldrin	0.24	0.056
a-Endosulfan	0.22	0.056
b-Endosulfan	0.22	0.056
Endrin	0.086	0.036
Heptachlor	0.52	0.0038
Heptachlor epoxide	0.52	0.0038
PCBs, total	---	0.014
Toxaphene	0.73	0.0002
Tributyltin (TBT)	0.46	0.072

* Criteria for these metals are expressed as dissolved.

** Criteria for these metals are expressed as dissolved and are a function of total hardness (mg/L). Hardness-dependent metals criteria may be calculated from the following (values displayed above correspond to a total hardness of 100 mg/l and may have been rounded):

$$\text{CMC (dissolved)} = \exp\{mA[\ln(\text{hardness})]+bA\} \text{ (CF)}$$

$$\text{CCC (dissolved)} = \exp\{mC [\ln(\text{hardness})]+bC\} \text{ (CF)}$$

Chemical	MA	bA	MC	BC	Freshwater Conversion Factors (CF)	
					CMC	CCC

Cadmium	1.0166	-3.924	0.7409	-4.719	1.136672-[(ln hardness)(0.041838)]	1.101672-[(ln hardness)(0.041838)]
Chromium III	0.8190	3.7256	0.8190	0.6848	0.316	0.860
Copper	0.9422	-1.700	0.8545	-1.702	0.960	0.960
Lead	1.273	-1.460	1.273	-4.705	1.46203-[(ln hardness)(0.145712)]	1.46203-[(ln hardness)(0.145712)]
Nickel	0.8460	2.255	0.8460	0.0584	0.998	0.997
Silver	1.72	-6.59			0.85	
Zinc	0.8473	0.884	0.8473	0.884	0.978	0.986

If criteria are hardness-dependent, the Criterion Maximum Concentration (CMC) and Criterion Continuous Concentration (CCC) shall be based on the actual stream hardness. When an ambient hardness of less than 25 mg/l is used to establish criteria for cadmium or lead, the hardness dependent conversion factor (CF) shall not exceed one. When ambient hardness is greater than 400 mg/l, criteria shall be calculated according to one of the following two options: (1) calculate the criterion using a default Water Effects Ratio (WER) of 1.0 and a hardness of 400 mg/l in the hardness based equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the hardness based equation. For information concerning metals translation and site-specific criteria, see 1200-04-03-.02(9).

*** The acute (CMC) criterion for selenium is derived from the following formula:
 $CMC = 1/[(f1/CMC1) + (f2/CMC2)]$ where f1 and f2 are the fractions of total selenium that are treated as selenite and selenate, respectively, and CMC1 and CMC2 are 185.9 ug/L and 12.82 ug/L, respectively.

For purposes of water quality assessment, the Department will use 12.82 ug/L total recoverable selenium as a screening value. Where ambient levels exceed this screening value, selenium speciation will be done to calculate the instream criterion based on the acute formula.

**** If Standard Methods 4500-CN I (Weak Acid Dissociable), 4500-CN G (Cyanides Amenable to Chlorination after Distillation), or OIA-1677 are used, this criterion may be applied as free cyanide.

***** Criteria for pentachlorophenol are expressed as a function of pH. Values displayed above correspond to a pH of 7.8 and are calculated as follows:

$$CMC = \exp(1.005(pH) - 4.869) \quad CCC = \exp(1.005(pH) - 5.134)$$

- (h) Other Pollutants - The waters shall not contain other pollutants that will be detrimental to fish or aquatic life.
- (i) Iron – The waters shall not contain iron at concentrations that cause toxicity or in such amounts that interfere with habitat due to precipitation or bacteria growth.
- (j) Ammonia – The one-hour average concentration of total ammonia nitrogen (in mg N/L) shall not exceed the CMC (acute criterion) calculated using the following equations:

Where salmonid fish are present:

$$CMC = \frac{0.275}{1 + 10^{7.204 - pH}} + \frac{39.0}{1 + 10^{pH - 7.204}}$$

Or where salmonid fish are not present:

$$CMC = \frac{0.411}{1 + 10^{7.204-pH}} + \frac{58.4}{1 + 10^{pH-7.204}}$$

The thirty-day average concentration of total ammonia nitrogen (in mg N/L) shall not exceed the CCC (chronic criterion) calculated using the following equations:

When fish early life stages are present:

$$1 + 10^{7.688-pH} \cdot CCC = \left[\frac{0.0577}{1 + 10^{pH-7.688}} + \frac{2.487}{1 + 10^{pH-7.688}} \right] \cdot \text{MIN} (2.85, 1.45 \cdot 10^{0.028 \cdot (25-T)})$$

When fish early life stages are absent:

$$CCC = \left[\frac{0.0577}{1 + 10^{7.688-pH}} + \frac{2.487}{1 + 10^{pH-7.688}} \right] \cdot 1.45 \cdot 10^{0.028 \cdot (25-\text{MAX}(T,7))}$$

In addition, the highest four-day average within the 30-day period shall not exceed 2.5 times the CCC.

- (k) Nutrients - The waters shall not contain nutrients in concentrations that stimulate aquatic plant and/or algae growth to the extent that aquatic habitat is substantially reduced and/or the biological integrity fails to meet regional goals. Additionally, the quality of downstream waters shall not be detrimentally affected.

Interpretation of this provision may be made using the document Development of Regionally-based Interpretations of Tennessee's Narrative Nutrient Criterion and/or other scientifically defensible methods.

- (l) Coliform - The concentration of the E. coli group shall not exceed 630 per 100 ml as a geometric mean based on a minimum of 5 samples collected from a given sampling site over a period of not more than 30 consecutive days with individual samples being collected at intervals of not less than 12 hours. For the purposes of determining the geometric mean, individual samples having an E. coli group concentration of less than 1 per 100 ml shall be considered as having a concentration of 1 per 100 ml. In addition, the concentration of the E. coli group in any individual sample shall not exceed 2,880 per 100 ml.
- (m) Biological Integrity - The waters shall not be modified through the addition of pollutants or through physical alteration to the extent that the diversity and/or productivity of aquatic biota within the receiving waters are substantially decreased or adversely affected, except as allowed under 1200-04-03-.06.

Interpretation of this provision for any stream which (a) has at least 80% of the upstream catchment area contained within a single bioregion and (b) is of the appropriate stream order specified for the bioregion and (c) contains the habitat (riffle or rooted bank) specified for the bioregion, may be made using the most current revision of the Department's Quality System Standard Operating Procedure for Macroinvertebrate Stream Surveys and/or other scientifically defensible methods.

Interpretation of this provision for all other wadeable streams, lakes, and reservoirs may be made using Rapid Bioassessment Protocols for Use in Wadeable Streams and Rivers (EPA/841-B-99-002) or Lake and Reservoir Bioassessment and Biocriteria (EPA 841-B-98-007), and/or other scientifically defensible methods. Interpretation of this provision for wetlands or large rivers may be made using scientifically defensible methods. Effects to biological populations will be measured by comparisons to upstream conditions or to appropriately selected reference sites in

the same bioregion if upstream conditions are determined to be degraded.

- (n) Habitat - The quality of stream habitat shall provide for the development of a diverse aquatic community that meets regionally-based biological integrity goals. Types of habitat loss include, but are not limited to: channel and substrate alterations, rock and gravel removal, stream flow changes, accumulation of silt, precipitation of metals, and removal of riparian vegetation. For wadeable streams, the instream habitat within each subecoregion shall be generally similar to that found at reference streams. However, streams shall not be assessed as impacted by habitat loss if it has been demonstrated that the biological integrity goal has been met.
 - (o) Flow – Stream or other waterbody flows shall support the fish and aquatic life criteria.
- (4) Recreation.
- (a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.
 - (b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.
 - (c) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to recreation.
 - (d) Total Suspended Solids, Turbidity or Color - There shall be no total suspended solids, turbidity or color in such amounts or character that will result in any objectionable appearance to the water, considering the nature and location of the water.
 - (e) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of impoundments where stratification occurs will be measured at a depth of 5 feet, or mid- depth whichever is less, and the temperature in flowing streams shall be measured at mid-depth.
 - (f) Coliform - The concentration of the E. coli group shall not exceed 126 colony forming units per 100 ml, as a geometric mean based on a minimum of 5 samples collected from a given sampling site over a period of not more than 30 consecutive days with individual samples being collected at intervals of not less than 12 hours. For the purposes of determining the geometric mean, individual samples having an E. coli concentration of less than 1 per 100 ml shall be considered as having a concentration of 1 per 100 ml.

Additionally, the concentration of the E. coli group in any individual sample taken from a lake, reservoir, State Scenic River, Exceptional Tennessee Water or ONRW (1200-04-03-.06) shall not exceed 487 colony forming units per 100 ml. The concentration of the E. coli group in any individual sample taken from any other waterbody shall not exceed 941 colony forming units per 100 ml.
 - (g) Taste or Odor - The waters shall not contain substances that will result in objectionable taste or odor.
 - (h) Nutrients - The waters shall not contain nutrients in concentrations that stimulate aquatic plant and/or algae growth to the extent that the public's recreational uses of the waterbody or other downstream waters are detrimentally affected. Unless demonstrated otherwise, the nutrient criteria found in 1200-04-03-.03(3)(k) will be considered adequately protective of this use.
 - (i) Nutrient Response Criteria for Pickwick Reservoir: those waters impounded by Pickwick Dam on the Tennessee River. The reservoir has a surface area of 43,100 acres at full pool, 9,400 acres of which are within Tennessee. Chlorophyll *a* (corrected, as described in *Standard Methods for the Examination of Water and Wastewater, 20th Edition*, 1998): the mean of the photic-zone (See definition) composite chlorophyll *a* samples collected monthly April through September shall not exceed 18 µg/l, as measured over the deepest point, main river channel, dam forebay.

- (j) Toxic Substances - The waters shall not contain toxic substances, whether alone or in combination with other substances, that will render the waters unsafe or unsuitable for water contact activities including the capture and subsequent consumption of fish and shellfish, or will propose toxic conditions that will adversely affect man, animal, aquatic life, or wildlife. Human health criteria have been derived to protect the consumer from consumption of contaminated fish and water. The water and organisms criteria should only be applied to those waters classified for both recreation and domestic water supply. The criteria for recreation are as follows:

Compound	Water & Organisms Criteria * (ug/L)	Organisms Only Criteria (ug/L)
<u>INORGANICS</u>		
Antimony	5.6	640
Arsenic (c)	10.0	10.0
Mercury	0.05	0.051
Nickel	610	4600
Thallium	0.24	0.47
Cyanide	140	140
Selenium	170	4200
Dioxin **	0.000001	0.000001
<u>VOLATILES</u>		
Acrolein	6	9
Acrylonitrile (c)	0.51	2.5
Benzene (c)	22	510
Bromoform (c)	43	1400
Carbon tetrachloride (c)	2.3	16
Chlorobenzene	130	1600
Chlorodibromomethane (c)	4.0	130
Chloroform (c)	57	4700
Dichlorobromomethane (c)	5.5	170
1,2-Dichloroethane (c)	3.8	370
1,1-Dichloroethylene	330	7100
1,2-Dichloropropane (c)	5.0	150
1,3-Dichloropropene (c)	3.4	210
Ethylbenzene	530	2100
Methyl bromide	47	1500
Methylene chloride (c)	46	5900
1,1,2,2-Tetrachloroethane (c)	1.7	40
Tetrachloroethylene (c)	6.9	33
Toluene	1300	15000
1,2-Trans-Dichloroethylene	140	10000
1,1,2-Trichloroethane (c)	5.9	160
Trichloroethylene (c)	25	300
Vinyl chloride (c)	0.25	24

Compound	Water & Organisms Criteria * (ug/L)	Organisms Only Criteria (ug/L)
<u>ACID EXTRACTABLES</u>		
2-Chlorophenol	81	150
2,4-Dichlorophenol	77	290
2,4-Dimethylphenol	380	850
2-Methyl-4,6-dinitrophenol	13	280
2,4-Dinitrophenol	69	5300
Pentachlorophenol (c) (pH)	2.7	30
Phenol	10000	860000
2,4,6-Trichlorophenol (c)	14	24
<u>BASE NEUTRALS</u>		
Acenaphthene	670	990
Anthracene	8300	40000
Benzidine (c)	0.00086	0.0020
Benzo(a)anthracene (c)	0.038	0.18
Benzo(a)pyrene (c)	0.038	0.18
Benzo(b)fluoranthene (c)	0.038	0.18
Benzo(k)fluoranthene (c)	0.038	0.18
Bis(2-Chlorethyl)ether (c)	0.30	5.3
Bis(2-Chloro-isopropyl)ether	1400	65000
Bis(2-Ethylhexyl)phthalate (c)	12	22
Butylbenzyl Phthalate	1500	1900
2-Chloronaphthalene	1000	1600
Chrysene (c)	0.038	0.18
Dibenz(a,h)Anthracene (c)	0.038	0.18
1,2-Dichlorobenzene	420	1300
1,3-Dichlorobenzene	320	960
1,4-Dichlorobenzene	63	190
3,3-Dichlorobenzidine (c)	0.21	0.28
Diethyl phthalate	17000	44000
Dimethyl phthalate	270000	1100000
Di-n-butyl phthalate	2000	4500
2,4-Dinitrotoluene (c)	1.1	34
1,2-Diphenylhydrazine (c)	0.36	2.0
Fluoranthene	130	140
Fluorene	1100	5300
Hexachlorobenzene (c)	0.0028	0.0029
Hexachlorobutadiene (c)	4.4	180
Hexachlorocyclopentadiene	40	1100
Hexachloroethane (c)	14	33
Ideno(1,2,3-cd)Pyrene (c)	0.038	0.18
Isophorone (c)	350	9600
Nitrobenzene	17	690
N-Nitrosodimethylamine (c)	0.0069	30
N-Nitrosodi-n-Propylamine (c)	0.05	5.1
N-Nitrosodiphenylamine (c)	33	60
Pyrene	830	4000
1,2,4-Trichlorobenzene	35	70

Compound	Water & Organisms Criteria * (ug/L)	Organisms Only Criteria (ug/L)
<u>PESTICIDES</u>		
Aldrin (c)	0.00049	0.00050
a-BHC (c)	0.026	0.049
b-BHC (c)	0.091	0.17
g-BHC - Lindane	0.98	1.8
Chlordane (c)	0.0080	0.0081
4-4'-DDT (c)	0.0022	0.0022
4,4'-DDE (c)	0.0022	0.0022
4,4'-DDD (c)	0.0031	0.0031
Dieldrin (c)	0.00052	0.00054
a-Endosulfan	62	89
b-Endosulfan	62	89
Endosulfan Sulfate	62	89
Endrin	0.059	0.06
Endrin Aldehyde	0.29	0.30
Heptachlor (c)	0.00079	0.00079
Heptachlor epoxide (c)	0.00039	0.00039
PCB, total (c)	0.00064	0.00064
Toxaphene (c)	0.0028	0.0028

(c) 10-5 risk level is used for all carcinogenic pollutants.

* These criteria are for protection of public health due to consumption of water and organisms and should only be applied to these waters designated for both recreation and domestic water supply.

** Total dioxin is the sum of the concentrations of all dioxin and dibenzofuran isomers after multiplication by Toxic Equivalent Factors (TEFs). Following are the TEFs currently recommended by EPA (subject to revision):

DIOXIN ISOMERS	TEF	FURAN ISOMERS	TEF
Mono-, Di-, & TriCDDs	0.0	Mono-, Di-, & TriCDFs	0.0
2,3,7,8 TCDD	1.0	2,3,7,8 TCDF	0.1
Other TCDDs	0.0	Other TCDFs	0.0
2,3,7,8 PeCDD	0.5	1,2,3,7,8 PeCDF	0.05
Other PeCDDs	0.0	2,3,4,7,8 PeCDF	0.5
		Other PeCDFs	0.0
2,3,7,8 HxCDD	0.1	Other PeCDFs	0.0
Other HxCDDs	0.0	2,3,7,8 HxCDF	0.1
		Other HxCDFs	0.0
2,3,7,8 HpCDD	0.01	2,3,7,8 HpCDF	0.01
Other HpCDDs	0.0	Other HpCDFs	0.0
OCDD	0.001	OCDF	0.001

(k) Other Pollutants - The waters shall not contain other pollutants in quantities which may have a detrimental effect on recreation.

(l) Fish Consumption Advisories - A public fishing advisory will be considered when the calculated risk of additional cancers exceeds 10⁻⁴ for typical consumers or 10⁻⁵ for atypical consumers (See definition). A "do not consume" advisory will be issued for the protection of typical consumers and a "precautionary advisory" will be issued for the protection of atypical consumers.

The following formula will be used to calculate the risk of additional cancers:

$$R = qE$$

where:

R= Plausible-upper-limit risk of cancer associated with a chemical in a fisheries species for a human subpopulation.

q = Carcinogenic Potency Factor for the chemical (mg kg⁻¹ day⁻¹)⁻¹ estimated as the upper 95 percent confidence limit of the slope of a linear dose-response curve. Scientifically defensible Potency Factors will be used.

E = Exposure dose of the chemical (mg kg⁻¹ day⁻¹) from the fish species for the human subpopulation in the area. E is calculated by the following formula:

$$E = \frac{C \times I \times X}{W} \quad \text{where:}$$

C = Concentration of the chemical (mg/kg) in the edible portion of the species in the area. The average levels from multiple fillet samples of the same species will be used. Catfish will be analyzed skin-off with the belly flap included in the sample. Gamefish and carp will be analyzed skin-on with the belly flap included in the sample. Sizes of fish collected for analysis will represent the ranges of sizes likely to be collected and consumed by the public. References on this subject include, but are not limited to: EPA's Guidance for Assessing Chemical Contaminant Data for use in Fish Advisories.

I = Mean daily consumption rate (g/day averaged over 70 year lifetime) of the fish species by the human subpopulation in the area. 6.5 g/day will be used unless better site-specific information is available.

X = Relative absorption coefficient, or the ratio of human absorption efficiency to test animal absorption efficiency of the chemical. Assumed to be 1.0 unless better information is available.

W = Average human mass (kg). 75 kg will be used.

For substances for which the public health concern is based on toxicity, a "do not consume" advisory will be considered warranted when average levels of the substance in the edible portion of fish exceed U.S. Food and Drug Administration (FDA) Action Levels or EPA national criteria. Based on the rationale used by FDA or EPA for their levels, the Commissioner may issue precautionary advisories at levels appropriate to protect sensitive populations.

(m) Flow – Stream flows shall support recreational uses.

(5) Irrigation.

(a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.

(b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.

(c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not impair its use for irrigation.

(d) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water for irrigation purposes.

- (e) Temperature - The temperature of the water shall not interfere with its use for irrigation purposes.
 - (f) Toxic Substances - The waters shall not contain toxic substances whether alone or in combination with other substances which will produce toxic conditions that adversely affect the quality of the waters for irrigation.
 - (g) Other Pollutants - The waters shall not contain other pollutants in quantities which may be detrimental to the waters used for irrigation.
- (6) Livestock Watering and Wildlife.
- (a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.
 - (b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.
 - (c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not impair its use for livestock watering and wildlife.
 - (d) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as to interfere with livestock watering and wildlife.
 - (e) Temperature - The temperature of the water shall not interfere with its use for livestock watering and wildlife.
 - (f) Toxic Substances - The waters shall not contain substances whether alone or in combination with other substances, which will produce toxic conditions that adversely affect the quality of the waters for livestock watering and wildlife.
 - (g) Other Pollutants - The waters shall not contain other pollutants in quantities which may be detrimental to the water for livestock watering and wildlife.
- (7) Navigation.
- (a) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as to interfere with navigation.
 - (b) Other Pollutants - The waters shall not contain other pollutants in quantities which may be detrimental to the waters used for navigation.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.04 Definitions.

In addition to the meanings provided in the Water Quality Control Act (T.C.A. §§69-3-103), terms used in these rules shall have the meanings provided below.

- (1) Atypical consumers - Those persons in the vicinity of a stream or lake who due to physiological factors or previous exposure are more sensitive to specific pollutants than is the population in general. Examples of atypical consumers may include, but are not limited to: children; pregnant or nursing women; subsistence fishermen; frequent purchasers of commercially harvested fish; and agricultural, industrial, or military personnel who may have had previous occupational exposure to the contaminant of concern.
- (2) Conventional Water Treatment - Conventional water treatment as referred to in the criteria denotes coagulation, sedimentation, filtration, and chlorination or disinfection.
- (3) Degradation - The alteration of the properties of waters by the addition of pollutants or removal of habitat.

- (4) De Minimis – Alterations, other than those resulting in the condition of pollution or new domestic wastewater discharges, that represent either a small magnitude or a short duration shall be considered a de minimis impact and will not be considered degradation for purposes of implementing the antidegradation policy. Discharges other than domestic wastewater will be considered de minimis if they are temporary or use less than five percent of the available assimilative capacity for the substance being discharged. Water withdrawals will be considered de minimis if less than five percent of the 7Q10 flow of the stream is removed (the calculations of the low flow shall take into account existing withdrawals). Habitat alterations authorized by an Aquatic Resource Alteration Permit (ARAP) are de minimis if the division finds that the impacts are offset by a combination of impact minimization and/or in-system mitigation.

If more than one activity has been authorized in a segment and the total of the impacts uses no more than ten percent of the assimilative capacity, available habitat, or 7Q10 low flow, they are presumed to be de minimis. Where total impacts use more than ten percent of the assimilative capacity, available habitat, or 7Q10 low flow they may be treated as de minimis provided that the division finds on a scientific basis that the additional degradation has an insignificant effect on the resource and that no single activity is allowed to consume more than five percent of the assimilative capacity, available habitat or 7Q10 low flow.

- (5) Ecoregion - A relatively homogeneous area defined by similarity of climate, landform, soil, potential natural vegetation, hydrology, or other ecologically relevant variables.
- (6) Epilimnion – The upper layer of water in a thermally stratified lake or reservoir. This layer consists of the warmest water and has a fairly uniform (constant) temperature.
- (7) Hypolimnion - The lowest layer in a thermally stratified lake or reservoir. This layer consists of colder, more dense water, has a constant temperature and no mixing occurs. The hypolimnion of a eutrophic lake is usually low or lacking in oxygen.
- (8) Mixing Zone - That section of a flowing stream or impounded waters in the immediate vicinity of an outfall where an effluent becomes dispersed and mixed.
- (9) Measurable degradation – Changes in chemical or physical parameters of waters that exceed the lowest detection level identified in either rule 1200-04-03-.05(8), 1200-05-01-.10(1)(r), or 1200-05-01-.14(10)(d).
- (10) Photic Zone - the region of water through which light penetrates and where photosynthetic organisms live.
- (11) Reference condition - A parameter-specific set of data from regional reference sites that establish the statistical range of values for that particular substance at least-impacted streams.
- (12) Reference Site - Least impacted waters within an ecoregion that have been monitored to establish a baseline to which alterations of other waters can be compared.
- (13) Stratification – The tendency in lakes and reservoirs for distinct layers of water to form as a result of vertical change in temperature and, therefore, in the density of water. During stratification, dissolved oxygen, nutrients, and other parameters of water chemistry do not mix well between layers, establishing chemical as well as thermal gradients.
- (14) Subecoregion - A smaller, more homogenous area that has been delineated within an ecoregion.
- (15) Thermocline – The middle layer in a thermally stratified lake or reservoir. In this layer there is a rapid decrease in temperature with depth. Also called the metalimnion.
- (16) Wadeable streams - Streams that can be sampled using a hand held, one meter square or smaller kick net without water and materials escaping over the top of the net.
- (17) Wet Weather Conveyances - Man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and which do not support fish or aquatic life and are not suitable for drinking water supplies. [T.C.A. § 4-5-202, T.C.A. § 69-3-105.]

1200-04-03-.05 Interpretation of Criteria.

- (1) Interpretation of the above criteria shall conform to any rules and regulations or policies adopted by the Water Quality Control Board.
- (2) The effect of treated sewage or waste discharge on the receiving waters shall be considered beyond the mixing zone except as provided in this paragraph. The extent to which this is practicable depends upon local conditions and the proximity and nature of other uses of the waters. Such mixing zones (See definition) shall be restricted in area and length and shall not (i) prevent the free passage of fish or cause aquatic life mortality in the receiving waters; (ii) contain materials in concentrations that exceed acute criteria beyond the zone immediately surrounding the outfall; (iii) result in offensive conditions; (iv) produce undesirable aquatic life or result in dominance of a nuisance species; (v) endanger the public health or welfare; or (vi) adversely affect the reasonable and necessary uses of the area; (vii) create a condition of chronic toxicity beyond the edge of the mixing zone; (viii) adversely affect nursery and spawning areas; or (ix) adversely affect species with special state or federal status.
- (3) The technical and economical feasibility of waste treatment, recovery, or adjustment of the method of discharge to provide correction shall be considered in determining the time to be allowed for the development of practicable methods and for the specified correction, to the extent allowable under Rule 1200-04-03-.06(5).
- (4) Water quality criteria for fish and aquatic life and livestock watering and wildlife set forth shall generally be applied on the basis of the following stream flows: unregulated streams - stream flows equal to or exceeding the 7-day minimum, 10-year recurrence interval; regulated streams - all flows in excess of the minimum critical flow occurring once in ten years as determined by the division. However, criteria that are wholly or partially based on direct measurements of ambient aquatic community health, such as the nutrient, biological integrity, and habitat criteria for the fish and aquatic life use, shall support the designated use. These criteria should be considered independent of a specified minimum flow duration and recurrence. All other criteria shall be applied on the basis of stream flows equal to or exceeding the 30 day minimum 5 year recurrence interval.
- (5) In general, deviations from normal water conditions are undesirable, but the magnitude and duration of the deviations shall be considered in interpreting the above criteria. When interpreting pathogen data, samples collected during or immediately after significant rain events may be treated as outliers unless caused by point source dischargers. Such outlier data may be given less weight in assessment decisions than non-rain event sampling results.
- (6) The criteria and standards provide that all discharges of sewage, industrial waste, and other waste shall receive the degree of treatment or effluent reduction necessary to comply with water quality standards, or state or federal laws and regulations pursuant thereto, and where appropriate will comply with the "Standards of Performance" as required by the Tennessee Water Quality Control Act, (T.C.A., §§69-3-101, et seq.).
- (7) Where naturally formed conditions (e.g., geologic formations) or background water quality conditions are substantial impediments to attainment of the water quality standards, these natural or background conditions shall be taken into consideration in establishing any effluent limitations or restrictions on discharges to such waters or in water quality assessment.
- (8) There are cases in which the in-stream criteria as established by this rule are less than current chemical technological capabilities for analytical detection. In instances where permit limits established through implementation of these criteria are below analytical capabilities, compliance with those limits will be determined using the following detection limits, unless in specific cases other detection limits are demonstrated to be the best achievable because of the particular nature of the wastewater being analyzed:

REQUIRED METHOD DETECTION LEVELS [RDL] (ug/l)
Approved EPA Methods Must Be Used

<u>INORGANICS</u>	<u>RDL</u>	<u>BASE NEUTRALS</u>	<u>RDL</u>
Antimony	3.0	Acenaphthylene (c)	2.3
Arsenic, total (c)	1.0	Anthracene	0.7
Arsenic (III) (c)	1.0	Benzo(a)anthracene (c)	0.3
Beryllium (c)	1.0	Benzo(a)pyrene (c)	0.3
Cadmium	1.0	3,4-Benzofluoranthene (c)	0.3
Chromium, total	1.0	Benzo(k)fluoranthene (c)	0.3
Chromium (III)	1.0	Bis(2-Chloroethyl)ether (c)	1.0
Chromium (VI)	10.0	Bis(2-Ethylhexyl)phthalate(c)	2.5
Copper	1.0	Chrysene	2.5
Lead	1.0	1,2-Dichlorobenzene	2.0
Mercury	0.2	1,3-Dichlorobenzene	2.0
Nickel	10.0	1,4-Dichlorobenzene -	
Selenium	2.0	para-Dichlorobenzene	4.4
Silver	1.0	Diethyl phthalate	1.9
Zinc	1.0	Dimethyl phthalate	1.6
Cyanide	5.0	Di-n-Butyl phthalate	2.5
		2,4-Dinitrotoluene (c)	1.0
Dioxin	0.00001	Fluoranthene	2.2

<u>INORGANICS</u>	<u>RDL</u>	<u>BASE NEUTRALS</u>	<u>RDL</u>
		Fluorene	0.3
		Hexachlorobenzene (c)	1.9
		Hexachlorobutadiene (c)	5.0
		Hexachloroethane (c)	0.5
		Nitrobenzene	10.0
		Phenanthrene	0.7
		Pyrene	0.3
		<u>PESTICIDES</u>	
		Aldrin (c)	0.5
		g-BHC - Lindane (c)	0.5
		Chlordane (c)	0.1
		4-4'-DDT (c)	0.1
		4,4'-DDE (c)	0.1
		4,4'-DDD (c)	0.1
		Dieldrin (c)	0.05
		a-Endosulfan	0.1
		b-Endosulfan	0.05
		Endrin	0.1
		Heptachlor (c)	0.05
		Heptachlor epoxide (c)	0.08
		PCB-1242 (c)	0.5
		PCB-1254 (c)	0.5
		PCB-1221 (c)	0.5
		PCB-1232 (c)	0.5
		PCB-1248 (c)	0.5
		PCB-1260 (c)	0.5
		PCB-1016 (c)	0.5
		PCB, total (c)	0.5
		Toxaphene (c)	0.5
		(c) - carcinogen	
<u>VOLATILES</u>			
Acrolein	1.0		
Acrylonitrile (c)	1.0		
Benzene (c)	1.0		
Bromoform -			
Tribromomethane (c)	1.0		
Carbon tetrachloride (c)	1.0		
Chloroform -			
Trichloromethane (c)	0.5		
Dichlorobromomethane (c)	1.0		
1,2-Dichloroethane (c)	1.0		
1,1-Dichloroethylene (c)	1.0		
1,3-Dichloropropylene	1.0		
Ethylbenzene	1.0		
Methyl chloride -			
Chloromethane (c)	1.0		
Methylene chloride -			
Dichloromethane (c)	1.0		
1,1,2,2-Tetrachloroethane (c)	0.5		
Tetrachloroethylene (c)	0.5		
Toluene	1.0		
1,1,1-Trichloroethane	1.0		
1,1,2-Trichloroethane (c)	0.2		
Trichloroethylene (c)	1.0		
Vinyl chloride (c)	2.0		
<u>ACID EXTRACTABLES</u>			
2-Methyl-4,6-dinitrophenol-			
4,6-Dinitro-o-cresol	24.0		
2,4-Dinitrophenol	42.0		
Pentachlorophenol	5.0		
2,4,6-Trichlorophenol (c)	2.7		

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

(1) General

- (a) It is the purpose of Tennessee's standards to fully protect existing uses of all surface waters as established under the Act. Existing uses are those actually attained in the waterbody on or after November 28, 1975. Additionally, the Tennessee Water Quality Standards shall not be construed as permitting the degradation (see definition) of high quality surface waters. Where the quality of Tennessee waters is better than the level necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality will be maintained and protected unless the state finds, after intergovernmental coordination and public participation, that lowering water quality is necessary to accommodate important economic or social development in the area in which the waters are located. Sources exempted from permit requirements under the Water Quality Control Act should utilize all cost-effective and reasonable best management practices. Where new or increased temperature alterations are proposed, a successful demonstration as determined by the state under Section 316(a) of the Clean Water Act, 33 U.S.C. §1326, shall be considered to be in compliance with this rule.
- (b) To apply this antidegradation statement in the permitting context, the Department shall first determine if the application is complete. Absent extraordinary circumstances, the Department shall notify the applicant that an application is complete or of any deficiencies within 30 days of receipt of the application. As well as providing all of the information requested on the forms provided, a complete application will analyze alternatives and demonstrate why the activity that is proposed in the permit application has the least impact to waters of the feasible alternatives and it will discuss the social and economic consequences of each alternative. It will also either demonstrate why the proposed activity will not cause degradation or why it is justified because of necessary economic and social development. Alternatives analyses shall include, at a minimum, completed and accurate Worksheets A and B for public sector applicants or Worksheets A and G for private system applicants, or shall provide alternative information as directed by the Department. Additionally, to provide information to the Department regarding the applicant's claim of economic/social necessity, public sector applicants shall complete and submit, at a minimum, Forms O, P, Q, S, T, U, and AA, found in the EPA guidance document (Economic Guidance); private sector applicants shall complete and submit, at a minimum, Forms O, R, V, W, X, Y, Z, and AB, found in the EPA guidance document (Economic Guidance); provided either type of applicant shall provide alternative information as directed by the Department. These forms are found in the EPA guidance document entitled Interim Economic Guidance for Water Quality Standards: Workbook (EPA 823/B-95-002) (Economic Guidance). Reasonable alternatives for the various activities include, but are not limited to the following actions:
1. Alternatives for discharges include connection to an existing collection system, land application, water reuse, water recycling, or other treatment alternatives. For small domestic discharges, connection to an existing system or land application will be considered preferable.
 2. For water withdrawals, alternatives include water conservation, water reuse or recycling, off-stream impoundments, water harvesting during high flow conditions, regionalization, withdrawing water from a larger waterbody, use of ground water, connection to another water supply with available capacity, and pricing structures that encourage a reduction in consumption.
 3. For activities that cause habitat alterations, alternatives that minimize or avoid degradation should be explored and explained by the applicant. These avoidance or minimization activities could include maintaining or enhancing buffer zones, bridging a stream rather than culverting it, altering the footprint of a project instead of relocating a stream, or using a culvert without a bottom, instead of one that is fully concreted.
- (c) Next, the Department shall determine if degradation would occur as a result of the proposed activity. Not all activities cause an addition of pollutants or impact habitat. It may be determined that a proposed activity will not cause degradation as a factual matter or it may be deemed that any degradation will be de minimis and therefore, not degradation by definition.

(d) After the two steps described in subparagraphs (b) and (c) of this paragraph, the Department shall determine whether the waters impacted by the activity are ones with available conditions, unavailable conditions, Exceptional Tennessee Waters, or Outstanding Natural Resource Waters. Some waterbodies will be in more than one category; for example, a stream segment may have unavailable conditions for one parameter and available conditions for others and Exceptional Tennessee Waters may also have unavailable conditions for certain parameters. Activities proposed for waters that are not identified as either being Exceptional Tennessee Waters (1200-04-03-.06(4)) or Outstanding National Resource Waters (1200-04-03-.06(5)) will be evaluated on the basis of 1200-04-03-.06(2) and (3). If the Department determines that the activity would cause degradation of Exceptional Tennessee Waters, it shall notify the applicant in writing.

(2) Unavailable conditions

Unavailable conditions exist where water quality is at, or fails to meet, the criterion for one or more parameters. In waters with unavailable conditions based on a specific parameter, new or increased discharges of a substance that would cause or contribute to measurable degradation of that parameter will not be allowed. Where impairment by habitat alteration exists, additional significant loss of habitat within the same area of influence shall not be authorized unless avoidance, minimization, or in-system mitigation can render the impact de minimis.

(3) Available conditions

(a) Available conditions exist where water quality is better than the applicable criterion for a specific parameter. In available conditions, new or additional degradation for that parameter will only be allowed if the applicant has demonstrated to the Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area. As is true with other requirements, if a permit application, together with any supplemental material submitted, does not make this demonstration, the Department may either impose additional conditions in the permit or deny the application.

(b) For authorized new or expanded discharges and for authorization of habitat alteration, a record of the antidegradation determination(s) will be maintained and will be available for public review. Public participation and intergovernmental coordination will be provided in conjunction with permitting activities.

(4) Exceptional Tennessee Waters

(a) Exceptional Tennessee Waters are waters that are in any one of the following categories:

1. Waters within state or national parks, wildlife refuges, forests, wilderness areas, or natural areas;
2. State Scenic Rivers or Federal Wild and Scenic Rivers;
3. Federally-designated critical habitat or other waters with documented non-experimental populations of state or federally-listed threatened or endangered aquatic or semi-aquatic plants, or aquatic animals;
4. Waters within areas designated as Lands Unsuitable for Mining pursuant to the federal Surface Mining Control and Reclamation Act where such designation is based in whole or in part on impacts to water resource values;
5. Waters with naturally reproducing trout;
6. Waters with exceptional biological diversity as evidenced by a score of 40 or 42 on the Tennessee Macroinvertebrate Index (or a score of 28 or 30 in subecoregion 73a) using protocols found in TDEC's 2006 Quality System Standard Operating Procedure for Macroinvertebrate Stream Surveys, provided that the sample is considered representative of overall stream conditions; or

7. Other waters with outstanding ecological, or recreational value as determined by the Department. When application of this provision is a result of a request for a permit, such preliminary determination is to be made within 30 days of receipt of a complete permit application.

(b) The Department will maintain a list of waterbodies that have been reviewed and are known to have one or more of the above characteristics on its website and will make paper copies of that list available upon request.

(c) In waters identified as Exceptional Tennessee Waters no degradation will be allowed unless and until it is affirmatively demonstrated to the Department, after full satisfaction of the following intergovernmental and public participation provisions, that a change is justified as a result of necessary economic or social development and will not interfere with or become injurious to any classified uses existing in such waters. At the time of permit renewal, previously authorized discharges, including upstream discharges, which presently degrade Exceptional Tennessee Waters, will be subject to a review of updated alternatives analysis information provided by the applicant, but not to a determination of economic/social necessity. Public participation for these existing discharges will be provided in conjunction with permitting activities. Sources exempted from permit requirements under the Water Quality Control Act should utilize all cost-effective and reasonable best management practices.

(d) Determination of Economic/Social Necessity - Where reasonable alternatives to degradation to an Exceptional Tennessee Water are not feasible, applicants may ask the Department to determine that the proposed degradation is justified on the basis of economic or social necessity. The applicant shall have the burden of establishing to the Department that a change is justifiable as a result of necessary economic or social development and will not interfere with or become injurious to any classified uses existing in such waters. The Department's determination that degradation is justified or unjustified shall be subject to review by the Water Quality Control Board as part of a permit appeal in accordance with 1200-04-03-.06(6).

(e) Public Participation

The Department shall give notice to the public when it has determined that a pending permit application would cause degradation of an Exceptional Tennessee Water.

(5) Outstanding National Resource Waters

(a) The following streams or portions of streams are designated as ONRW:

	<u>WATERBODY</u>	<u>PORTION DESIGNATED AS ONRW</u>
1.	Little River	Portion within Great Smoky Mountains National Park.
2.	Abrams Creek	Portion within Great Smoky Mountains National Park.
3.	West Prong Little Pigeon River	Portion within Great Smoky Mountains National Park upstream of Gatlinburg.
4.	Little Pigeon River	From the headwaters within Great Smoky Mountains National Park downstream to the confluence of Mill Branch.
5.	Big South Fork Cumberland River	Portion within Big South Fork National River and Recreation Area.
6.	Reelfoot Lake	Tennessee portion of the lake and its associated wetlands.
7.	The portion of the Obed River that is designated as a federal wild and scenic river as of June 22, 1999 is designated as ONRW, provided however, that if the current search for a regional water supply by the Cumberland Plateau Regional Water Authority results in a	

determination that it is necessary to utilize the Obed River as its source of drinking water, for that purpose the Obed shall be designated as an Exceptional Tennessee Water and any permit issued for that project, whether state, federal, or otherwise, shall be considered under the requirements for Exceptional Tennessee Waters.

- (b) The Department may recommend to the Water Quality Control Board that certain waterbodies be designated as Outstanding National Resource Waters (ONRWs). These shall be high quality waters which constitute an outstanding national resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance.

Designation of ONRWs must be made by the Water Quality Control Board and will be accomplished in accordance with Section 69-3-105(a)(1) of the Tennessee Water Quality Control Act and through the appropriate rulemaking process.

In surface waters designated by the Water Quality Control Board as ONRWs, no new discharges, expansions of existing discharges, or mixing zones will be permitted unless such activity will not result in measurable degradation of the water quality. Existing water quality will be the criteria in these waters. Physical alterations that cause degradation to the ONRW will not be allowed. At time of permit renewal, previously authorized discharges, including upstream discharges, which presently degrade an ONRW, will be subject to alternatives analysis. Public participation for these existing discharges will be provided in conjunction with permitting activities.

(6) Appeals

Any party who is aggrieved by an action of the Department in applying this Antidegradation rule may raise that issue as part of an appeal of the issuance or denial of the permit in accordance with the provisions of T.C.A. §69-3-105(i) in addition to any other issues. In the event of an appeal of a permit that authorizes degradation of an Exceptional Tennessee Water, the filing of a timely appeal shall stay the effectiveness of the permit until the resolution of the appeal, including any court review, becomes final.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.07 Ground Water Classification.

- (1) Purpose and Intent. It is one of the primary goals of the Tennessee Water Quality Control Act, T.C.A. 69-3-101 et. seq. (the "Act") to protect our valuable ground water resource. This rule classifies ground water across the state based on the factors stated in the Act, T.C.A. 69-3-105(a)(2) and establishes ground water quality criteria. The quality of ground water varies in Tennessee, some aquifers, or portions thereof, produce water with sufficient quality and quantity to be used by our citizens directly as a drinking water supply, other aquifers, or portions thereof, produce water in sufficient quantities to be used as a water supply but the water requires treatment before it can be used as such. Finally, some aquifers, or portions thereof, either have levels of naturally occurring constituents that make the resource unusable as a drinking water supply or the aquifer does not produce enough water to be used as a drinking water supply. The Board recognizes these rules apply to both permitting activities and response actions, as the term response is defined rule 1200-01-13-.02(1)(ff). The abatement of pollution is a goal of the Act and these rules. These rules provide appropriate flexibility in the regulatory process to protect our ground water resource. Allowing the beneficial use and/or reuse of brownfield areas for some permitted waste management activities reduces the use of greenfield areas for such purposes; which will conserve and protect our environment. However, the Site Specific Impaired classification does not apply in the context of activities involving areas with no ground water contamination. When ground water has been polluted by human activity, these rules set forth the procedures and standards for any necessary ground water remediation. In certain cases, due to site specific conditions, it may not be technologically feasible to clean up a site and/or the costs associated with such clean up or other factors may substantially outweigh the benefits of the restored resource. These rules establish a Site Specific Impaired classification that may apply in such areas after a thorough evaluation of feasibility of remediation and the potential risk of allowing contaminants to remain in ground water. The Board recognizes that several Divisions within the Department have a role in protecting ground water resources. It is not the intent of these rules to change the responsibilities of those programs. It is, however, the intent of these rules to provide a uniform basis for decisions involving ground water that may be applied by all Divisions of the Department. The Board does not intend these rules to affect in any way the ability of the State to seek natural resource damages from responsible parties when ground water has been contaminated by human activity.

- (2) The ground water of the State is classified as follows:
- (a) Special Source Ground Waters - This is ground water with exceptional quality and quantity, which may serve as a valuable source for water supply or which is ecologically significant. Special source ground water is vulnerable to contamination. Through the rulemaking process, the Water Quality Control Board will amend this rule to include the specific area of an aquifer which receives this designation. The Board shall clearly define the horizontal and vertical boundaries of ground water designated as Special Source Ground Water. In making this decision, the Board shall consider the following factors as submitted by the applicant:
1. The vulnerability of the aquifer, or portion thereof, to contamination due to hydrogeologic characteristics;
 2. The number of persons or the proportion of the population using the ground water as a drinking water supply;
 3. A comparison of the economic, social and environmental benefits and costs of maintaining the special source ground water with the economic, social and environmental benefits and costs of replacing the special source ground water;
 4. An evaluation of the ecological and environmental impact should the quality of the special source ground water be compromised; and
 5. Other pertinent information as deemed necessary by the petitioner or the Department. Because such action is a rulemaking procedure, public input may be made as provided in the Uniform Administrative Procedures Act, T.C.A. 4-5-201 et. seq., but not as a contested case under T.C.A. 4-5-301 et. seq.
- (b) General Use Ground Water - Except for aquifers, or portions thereof, that have been designated as Special Source Ground Water, all ground water which, as it is encountered, has naturally occurring levels of Total Dissolved Solids of 1000 parts per million or less is classified as General Use Ground Water upon certification by the Commissioner; provided the aquifer or portion of an aquifer can produce an average yield of at least one (1) gallon per minute over a twenty four (24) hour period in a properly constructed six (6) inch water well or a well of alternate construction and equivalent yield approved by the Department. The well shall have three well volumes purged before the twenty four (24) hour pump test begins. Any ground water which is used as a source of drinking water is also classified as General Use regardless of the well yield or the ground water's natural quality, unless that ground water meets the requirements for the Site Specific Impaired classification in 1200-04-03-.07(2)(d).
- (c) Limited Use Ground Water - This is ground water which is not currently a source of drinking water and is classified as Limited Use ground water upon certification by the Commissioner:
1. Ground water with naturally occurring levels of Total Dissolved Solids above 1,000 ppm but less than 3,000 ppm; or
 2. Any aquifer or portion of an aquifer which is not capable of producing an average yield of one (1) gallon per minute over a twenty four (24) hour period in a properly constructed six (6) inch diameter water well or a well of alternate construction and equivalent yield approved by the Department. The well shall have three well volumes purged before the twenty four (24) hour pump test begins; or
 3. Ground water contaminated by human activity previous to November 19, 1980 if: (i) there are no liable parties as defined in T.C.A., 68-212-202(3)(B), (C), or (D); and (ii) the current property owner did not cause the ground water contamination. When ground water is encountered and certified by the Commissioner to be Limited Use as described above, the areal extent of the Limited Use ground water shall be delineated. This means the vertical and horizontal boundaries shall be established by sampling from properly constructed ground water monitoring wells, existing water wells and/or springs or by use of other appropriate means; including, but not limited to, topographical evaluations, dye

traces, geologic and hydrologic modeling, etc. The horizontal boundaries of the Limited Use ground water cannot extend beyond the perimeter investigated as described above. The vertical boundaries of the Limited Use ground water can not exceed the depth of the ground water investigated as described above. Figures which clearly depict the horizontal and vertical boundaries of the Limited Use ground water must be submitted with the plans/reports required by the response action or permitting action. Any ground water used as a drinking water source, at the time of classification, regardless of its natural quality or the aquifer yield cannot be classified as Limited Use ground water.

- (d) Site Specific Impaired Ground Water- This is ground water that has been contaminated by human activity and it is not technologically feasible to remediate the ground water to the level required by other classifications or if the costs of such a remediation substantially outweigh the benefits of the restored resource. Ground water shall be classified as Site Specific Impaired upon certification by the Commissioner. The process used to certify ground water as Site Specific Impaired is stated in 1200-04-03-.09.
1. When ground water is encountered and certified by the Commissioner to be Site Specific Impaired as described above, the areal extent of the Site Specific Impaired ground water shall be delineated. This means the vertical and horizontal boundaries shall be established by sampling from properly constructed ground water monitoring wells, existing water wells and/or springs or by use of other appropriate means; including, but not limited to, topographical evaluations, dye traces, geologic and hydrologic modeling, etc. The horizontal boundaries of the Site Specific Impaired ground water cannot extend beyond the perimeter investigated as described above. The vertical boundaries of the Site Specific Impaired ground water can not exceed the depth of the ground water investigated as described above. Figures which clearly depict the horizontal and vertical boundaries of the Site Specific Impaired ground water must be submitted to the Department in the plans/reports required by Rule 1200-04-03-.09.
- (e) Unusable Ground Water - The following ground water is classified as Unusable Ground Water upon certification by the Commissioner:
1. Ground water that is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation under Chapter 1200-04-06, Underground Injection Control, to contain minerals or hydrocarbons that, considering their quality and location are expected to be commercially producible; or
 2. Ground water at a depth and location which makes its use as a water supply economically or technically impractical; and
 3. Ground water with naturally occurring total dissolved solids of more than 3,000 ppm; or
 4. Ground water that was contaminated by human action in connection with the specific activity referenced below which: (i) is located over a Class III well mining area subject to subsidence or catastrophic collapse; or (ii) has been used to receive fluids and other substances from a Class I injection well, provided the Class I well was approved by the Department on or prior to September, 1985; or
 5. Ground water within the area excavated during the process of mining coal or other minerals pursuant to valid permits. Ground water beyond the excavation area will be classified as it is encountered as described elsewhere in this rule. Ground water which moves from the excavated area and becomes surface water shall be regulated as described in the surface water classification and criteria in these rules. When ground water is encountered and certified by the Commissioner to be Unusable as described above, the areal extent of the Unusable ground water shall be delineated. This means the vertical and horizontal boundaries shall be established by sampling from properly constructed ground water monitoring wells, existing water wells and/or springs evaluations, dye traces, geologic and hydrologic modeling, etc. The horizontal boundaries of the Unusable ground water cannot extend beyond the perimeter investigated as described above. The vertical boundaries of the Unusable ground water

can not exceed the depth of the ground water investigated as described above. Figures which clearly depict the horizontal and vertical boundaries of the Unusable ground water must be submitted with the plans/reports required by the response action or permitting action. Any aquifer or portion thereof classified for the placement of fluids or other substances by underground injection on or prior to September 1985 shall retain this classification and shall not be subject to the requirements of rules 1200-04-03-.09 and .10.

- (f) After the ground water in any specific location has been classified under these rules, a rulemaking action by the Water Quality Control Board will be required to reclassify that ground water.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.08 Ground Water Criteria

The water quality criteria for the different classes are as follows:

- (1) Special Source Ground Water:
 - (a) except for naturally occurring levels, shall not contain constituents in excess of the concentrations listed in Table 1; and
 - (b) except for naturally occurring levels, shall not contain constituents at levels exceeding those in Rule 1200-04-03-.03 except that the criteria for fish and aquatic life and recreational use shall not apply.
- (2) General Use Ground Water:
 - (a) except for naturally occurring levels, shall not contain constituents in excess of the concentrations listed in Table 1; and
 - (b) except for naturally occurring levels, shall not contain constituents at levels exceeding those in Rule 1200-04-03-.03 except that the criteria for fish and aquatic life and recreational use shall not apply.
- (3) Limited Use Ground Water:
 - (a) except for naturally occurring levels, shall not contain constituents at levels exceeding those for the use classifications in Rule 1200-04-03-.03 other than domestic water supply, fish and aquatic life and recreational use; and
 - (b) except for naturally occurring levels, in areas where historical contamination causes certain constituents to exceed the levels in rule 1200-04-03-.03, except for the criteria for domestic water supply, fish and aquatic life and recreational use, shall not contain those constituents at levels higher than those background levels; and
 - (c) shall contain no substances, whether alone or in combination with other substances, that are toxic, carcinogenic, mutagenic or teratogenic, other than those of natural origin, at levels and conditions which pose an unreasonable risk to the public health.
- (4) Site Specific Impaired Ground Water:
 - (a) except for naturally occurring levels, shall contain no substances, whether alone or in combination with other substances, that are toxic, carcinogenic, mutagenic or teratogenic, other than those of natural origin, at levels and conditions which pose an unreasonable risk to public health or the environment;
 - (b) shall contain no other constituents which pose an unreasonable risk to the public health or the environment; and

- (c) shall contain no constituents at levels that will prevent ground waters beyond the point of classification change from meeting the classification and criteria for those waters.
 - (d) Site Specific Impaired Criteria shall only apply to ground water that has been certified through the process set forth in Rule 1200-04-03-.09.
- (5) Unusable Ground Water:
- (a) except for naturally occurring levels, shall contain no substances, whether alone or in combination with other substances, that are toxic, carcinogenic, mutagenic or teratogenic, other than those of natural origin, at levels and conditions which pose an unreasonable risk to the public health; and
 - (b) shall contain no other constituents which pose an unreasonable risk to the public health.

Table 1. Inorganic Criteria for General Use Ground Water

Constituent	Concentration
Aluminum	0.2 mg/l
Arsenic	0.05 mg/l
Asbestos	7,000,000 fibers/l
Barium	2.0 mg/l
Cadmium	0.005 mg/l
Chloride	250 mg/l
Chromium	0.1 mg/l (Total)
Copper	1.0 mg/l
Fluoride	4.0 mg/l
Iron	10.0 mg/l
Lead	0.05 mg/l
Manganese	0.5 mg/l
Mercury	0.002 mg/l
Nitrate	10.0 mg/l as Nitrogen
Nitrite	1.0 mg/l as Nitrogen
Total Nitrate & Nitrite	10.0 mg/l (as Nitrate)
Selenium	0.05 mg/l
Silver	0.1 mg/l
Sulfate	500 mg/l
TDS (Total Dissolved Solids)	1000 mg/l
Zinc	5.0 mg/l

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.09 Site Specific Impaired Classification Application Process.

- (1) Any person who encounters ground water that may meet the requirements for Site Specific Impaired, may apply for the ground water at the site to be certified by the Department as meeting those requirements, using the process set forth in this rule. Any costs involved in making the application shall be borne by the applicant. The application shall include the following, unless it is determined by the Department in writing that the site conditions render any of them unnecessary:
 - (a) An assessment of the horizontal and vertical extent of the contamination;
 - (b) An evaluation of the hydrogeology of the area including but not limited to the ground water flow rate and direction, permeability, recharge area, ground water classification and location of local water wells, springs and seeps;

- (c) An evaluation of the area geology including but not limited to soil type, soil permeability, soil porosity, depth to bedrock, identification of geologic formations;
 - (d) A description of the corrective actions or response actions taken or proposed;
 - (e) The chemical characteristics of the constituent(s) including but not limited to the constituent's solubility, mobility, toxicity, and carcinogenicity, the nature of and the level of constituents to remain or be present in the ground water as well as the calculations and rationale used in the determination;
 - (f) a feasibility study which evaluates clean-up alternatives, the cost, and the time to complete each alternative;
 - (g) An evaluation of current and future ground water use within a (1/2) one-half mile radius of the contaminant plume; in karst areas the impact of conduit flow shall be evaluated;
 - (h) An evaluation of current and future land uses within a (1/2) one-half mile radius of the contaminant plume;
 - (i) An evaluation of the potential of the constituent to migrate through soil and ground water to:
 - 1. homes;
 - 2. buildings;
 - 3. surface waters;
 - 4. subsurface utilities; and
 - 5. adjacent properties;
 - (j) A description of any existing or proposed monitoring program to observe constituent levels in soil and ground water;
 - (k) Evaluation of the existing or anticipated actual exposure pathways (inhalation, ingestion, dermal contact, etc.) of the constituents and an assessment of the human health risks presented by exposure to the constituents as well as the impact, if any, of the constituents on fish and aquatic life pursuant to 1200-04-03;
 - (l) Consideration of the classification in Rule 1200-04-03-.07 that would apply to the ground water at the site if it were not contaminated;
 - (m) Analysis of the technological feasibility of cleaning up the ground water to the level necessary for the criteria that would apply to the ground water at the site if it were not contaminated and a comparison of the costs of investigation and cleanup and/or any other relevant factors with the benefits of the restored resource;
 - (n) A description of how and when the contamination occurred, if known; and
 - (o) Other items as requested by the Department associated with the evaluation of the application to certify ground water as Site Specific Impaired.
- (2) The Department will issue a public notice, unless a process for public notice and input is required by other applicable regulations (in such case that regulation will be followed), when an application to certify ground water as Site Specific Impaired has been reviewed and a tentative decision to approve it has been made. The Department will conduct a public hearing concerning the application if the issue generates substantial public interest. The Department will explain the reasons it is proposing to certify the ground water as meeting the requirements for the Site Specific Impaired classification and will consider all written and oral comments received.
- (3) In the evaluation of an application to certify ground water as Site Specific Impaired, the Commissioner or

this Board shall consider:

- (a) the extent of any threat to human health or safety;
- (b) the extent of damage to the environment;
- (c) technology commercially available to accomplish restoration;
- (d) a comparison of the environmental and economic costs and benefits to be derived from ground water quality restoration with the environmental and economic costs and benefits to be derived from classification as Site Specific Impaired;
- (e) the point of classification change;
- (f) other appropriate information presented in the application.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.10 Point of Classification Change.

- (1) "Point of Classification Change" shall mean the boundary location(s) within the relevant zone of an aquifer between the portion of the aquifer that is classified as Site Specific Impaired and any other classification. Compliance with the applicable criteria at this point shall be determined using sampling data, ground water modeling or other allowable mechanisms.
- (2) All areas with ground water classified as Site Specific Impaired must be owned or controlled by the person(s) subject to ground water cleanup or permitting obligations and/or subject to appropriate deed restrictions or other institutional controls. All locations outside the point of classification change must not exceed the applicable ground water criteria beyond the point of classification change.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

1200-04-03-.11 Appeals.

- (1) Any applicant aggrieved by the actions of the Department in applying Rules 1200-04-03-.07 through 1200-04-03-.10 may petition this Board for a hearing provided a written petition is submitted to and received by the Commissioner;
 - (a) within thirty (30) days of certification of ground water or disapproval of an application for certification of ground water.; or
 - (b) within thirty (30) days following the expiration of the one hundred and twenty (120) calendar days from receipt of an application for certification of ground water as Site Specific Impaired if the Department has not made written request for additional information.
- (2) The Commissioner's determination shall be final and not subject to review unless the written petition for hearing is submitted and received within this time frame. The written petition must set forth the basis for the appeal as required by the Administrative Procedures Act, T.C.A. Section 4-5-101 et seq., and the rules promulgated thereunder, particularly Rule 1360-04-01-.05.

Authority: T.C.A. §§4-5-201 et seq., and 69-3-105.

Chapter 1200-04-04
Use Classifications for Surface Waters

Amendments

Chapter 1200-04-04 Use Classifications for Surface Waters is deleted in its entirety and replaced with the following so that, as amended, Chapter 1200-04-04 shall read as follows:

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1200-04-04-.01 Memphis Area Basin	1200-04-04-.08 Upper Tennessee River Basin
1200-04-04-.02 Hatchie River Basin	1200-04-04-.09 Clinch River Basin
1200-04-04-.03 Obion-Forked Deer Basin	1200-04-04-.10 French Broad River Basin
1200-04-04-.04 Tennessee River Basin–Western Valley	1200-04-04-.11 Holston River Basin
1200-04-04-.05 Duck River Basin	1200-04-04-.12 Lower Cumberland River Basin
1200-04-04-.06 Elk River Basin (including Shoal Creek)	1200-04-04-.13 Upper Cumberland River Basin
1200-04-04-.07 Lower Tennessee River Basin (including Conasauga Basin)	1200-04-04-.14 Barren River Basin

Abbreviations for Designated Uses:

Domestic Water Supply	DWS
Industrial Water Supply	IWS
Fish and Aquatic Life	FAL
Trout Stream	TS
Naturally Reproducing Trout Stream	NRTS
Recreation	REC
Livestock Watering and Wildlife	LWW
Irrigation	IRR
Navigation	NAV

1200-04-04-.01 Memphis Area Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Mississippi River	Mississippi-Tennessee State Line (Mile 714.0) to Upstream End of Loosahatchie Bar (Mile 741.0)		X	X	X	X	X	X		
McKellar Lake	Mouth on Mississippi R. to Origin		X	X	X			X		
Nonconnah Creek	Mile 0.0 to Origin			X	X	X	X			
Wolf River	Mile 0.0 to 6.7 (L & N Railroad Bridge)			X	X	X	X			
Cypress Creek	Mile 0.0 to origin			X	X	X	X			
Wolf River	Mile 6.7 to Miss.-TN State Line (Mile 77.0)		X	X	X	X	X	X		
Loosahatchie River	Mile 0.0. to 20.9 (Austin Peay Hwy Bridge)			X	X	X	X			
Big Creek	Mile 0.0 to Origin			X	X	X	X			
North Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Crooked Creek	Mile 0.0 to Origin			X	X	X	X			
Trib. to Mile 3.0 of Crooked Creek	Mile 0.0 to Origin			X	X	X	X			
Loosahatchie River	Mile 20.9 (Austin Peay Hwy) to 30.7			X	X	X	X			
Clear Creek Canal	Mile 0.0 to Origin at Mile 2.6 (Confluence of Hall Creek and Cypress Creek Canal)			X	X	X	X			
Cypress Creek Canal	Mile 0.0 to Origin			X	X	X	X			
Loosahatchie River	Mile 30.7 to 45.5			X	X	X	X			
Middle Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
West Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
East Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
Little Cypress Creek	Mile 0.0 to Origin			X	X	X	X			
Canal										
Loosahatchie River	Mile 45.5 to 50.2			X	X	X	X			
Davis Creek	Mile 0.0 to Origin			X	X	X	X			
Town Branch	Mile 0.0 to Origin			X	X	X	X			
Loosahatchie River	Mile 50.2 to Origin			X	X	X	X			
All other surface waters named and unnamed in the Memphis Area Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified										
				X	X	X	X			

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.02 Hatchie River Basin

STREAM	DESCRIPTION	DOM	IWS	FAL	RE C	LWW	IRR	NAV	TS	NRTS
Mississippi River	Mile 741.0 to 820.0	X	X	X	X	X	X	X		
Hatchie River	Mile 0.0 to Mile 129.0	X	X	X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Alston Creek	Mile 0.0 to Origin			X	X	X	X			
Big Muddy Canal	Mile 0.0 to Origin			X	X	X	X			
Unnamed Trib. to Mile 3.1 of Big Muddy Canal	Mile 0.0 to Origin			X	X	X	X			
Sugar Creek	Mile 0.0 to Origin			X	X	X	X			
Mill Creek	Mile 0.0 to 2.0			X	X	X	X			
Pugh Creek South	Mile 0.0 to Origin			X	X	X	X			
Mill Creek	Mile 2.0 to Origin			X	X	X	X			
Hatchie River	Mile 129.0 to Mile 131.0		X	X	X	X	X			
Hatchie River	Mile 131.0 to Miss-Tenn State Line (Mile 188.5)	X	X	X	X	X	X			
Spring Creek	Mile 0.0 to Origin			X	X	X	X			
Cypress Creek	Mile 0.0 to Origin			X	X	X	X			
Tuscumbia River	Mile 0.0 to Miss-Tenn State Line (Mile 10.5)	X		X	X	X	X			
Cypress Creek	Mile 0.0 to 14.2			X	X	X	X			
Cypress Creek	Mile 14.2 to 15.2			X	X	X	X			
Cypress Creek	Mile 15.2 to Origin			X	X	X	X			
All other surface waters named and unnamed in the Hatchie Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified				X	X	X	X			

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105

1200-04-04-.03 Obion-Forked Deer Basin

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Mississippi River	Mile 820.0 to Mile 905.0 (Kentucky State Line)	X	X	X	X	X	X	X		
Obion River	Mile 0.0 to Confluence of North and South Fork Obion River (Mile 71.8)			X	X	X	X			
Running Reelfoot Bayou	Mile 0.0 to Reelfoot Lake Spillway			X	X	X	X			
Reelfoot Lake	Entirety			X	X	X	X			
Biffle Creek	Mile 0.0 to Origin			X	X	X	X			
Reeds Creek	Mile 0.0 to Origin			X	X	X	X			
Cool Springs Branch	Mile 0.0 to Origin			X	X	X	X			
North Fork Obion River	Mile 0.0 to Origin			X	X	X	X			
Hoosier Creek	Mile 0.0 to Origin			X	X	X	X			
First Creek	Mile 0.0 to Origin			X	X	X	X			
Grove Creek	Mile 0.0 to Origin			X	X	X	X			
Harris Fork Creek	Mile 0.0 to Kentucky-Tennessee State Line			X	X	X	X			
Walnut Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Trib. to Mile 3.8 of Walnut Fork Creek	Mile 0.0 to Origin			X	X	X	X			
South Fork Obion River	Mile 0.0 to 38.9 (Formed at Confluence of Beaver Creek and Crooked Creek)			X	X	X	X			
Mud Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Trib. to Mile 9.8 of Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Trib. to Mile 11.0 of Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Brassfield Creek	Mile 0.0 to Origin			X	X	X	X			
Trib. to Mile 0.5 of Brassfield Creek	Mile 0.0 to Origin			X	X	X	X			
Rutherford Fork	Mile 0.0 to Origin			X	X	X	X			
Carroll Creek	Mile 0.0 to Origin			X	X	X	X			
Wolf Creek	Mile 0.0 to Origin			X	X	X	X			
E. Fork Wolf Creek	Mile 0.0 to Origin			X	X	X	X			
Trib. to Mile 27.7 of Rutherford Fork	Mile 0.0 to Origin			X	X	X	X			
Middle Fork Obion River	Mile 0.0 to Origin			X	X	X	X			
Buckor Ditch	Mile 0.0 to Origin			X	X	X	X			
Spring Creek	Mile 0.0 to Origin			X	X	X	X			
Pritchett Branch	Mile 0.0 to Origin			X	X	X	X			
Bradford Creek	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Reedy Creek	Mile 0.0 to Origin			X	X	X	X			
Lick Creek	Mile 0.0 to Origin			X	X	X	X			
Clear Creek	Mile 0.0 to Origin			X	X	X	X			
Beaver Creek	Mile 0.0 to Origin		X	X	X	X	X			
Crooked Creek	Mile 0.0 to Origin		X	X	X	X	X			
Guins Creek	Mile 0.0 to Origin		X	X	X	X	X			
Trib. to Mile 9.7 of Guins Creek	Mile 0.0 to Origin			X	X	X	X			
Forked Deer River	Mouth at Obion River Mile 3.3 to Mile 20.3 at Confluence of North and South Fork			X	X	X	X	X		
South Fork Forked Deer Nixon Creek	Mile 0.0 to 48.8			X	X	X	X	X		
Little Nixon Creek	Mile 0.0 to Origin			X	X	X	X			
Old Channel Forked Deer-										
Trib. at Mile 35.8	Mile 0.0 to Origin			X	X	X	X			
South Fork Forked Deer River	Mile 48.8 to 70.3			X	X	X	X	X		
North Fork of South Fork Forked Deer River	Mile 0.0 to Origin			X	X	X	X			
Johnson Creek	Mile 0.0 to Origin			X	X	X	X			
Anderson Branch	Mile 0.0 to Origin			X	X	X	X			
Turkey Creek	Mile 0.0 to 1.2			X	X	X	X			
Trib. to Mile 1.0 of Turkey Creek	Mile 0.0 to Origin			X	X	X	X			
Turkey Creek	Mile 1.2 to Origin			X	X	X	X			
South Fork Forked Deer River	Mile 70.3 to Origin			X	X	X	X			
Sugar Creek	Mile 0.0 to Origin			X	X	X	X			
North Fork Forked Deer River	Mile 0.0 to 5.8			X	X	X	X	X		
North Fork Forked Deer River	Mile 5.8 to 33.9			X	X	X	X			
Middle Fork Forked Deer River	Mile 0.0 to Origin			X	X	X	X			
Mosquito Creek	Mile 0.0 to Origin			X	X	X	X			
Moize Creek	Mile 0.0 to Origin			X	X	X	X			
Dyer Creek	Mile 0.0 to Origin			X	X	X	X			
North Mud Creek	Mile 0.0 to Origin			X	X	X	X			
Cow Creek	Mile 0.0 to Origin			X	X	X	X			
Sand Creek	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
North Fork Forked Deer River	Mile 33.9 to Origin			X	X	X	X			
Trib. to Mile 857.5 of Mississippi River	Mile 0.0 to Origin			X	X	X	X			
Harris Ditch	Mile 0.0 to Origin			X	X	X	X			
All other surface waters named and unnamed in the Obion-Forked Deer Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified.				X	X	X	X			

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.04 Tennessee River Basin - Western Valley.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Tennessee River	Mile 49.1 (Tenn-Ky Line) to 215.1 (Tn-Miss Line)	X	X	X	X	X	X	X		
Big Sandy River	Mile 0.0 to 15.1		X	X	X	X	X	X		
Big Sandy River	Mile 15.1 to Origin		X	X	X	X	X			
West Sandy Creek	Mile 0.0 to Origin			X	X	X	X			
Holly Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Bailey Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Big Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
Little Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
Hurricane Creek	Mile 0.0 to Origin			X	X	X	X		X	
S. Fk Hurricane Cr	Mile 0.0 to Origin			X	X	X	X			
Beaverdam Creek	First bridge above mouth to origin.			X	X	X	X		X	
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Trace Creek	Mile 0.0 to Origin			X	X	X	X			
Cypress Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
North Indian Creek	Mile 0.0 to Origin			X	X	X	X			
Birdsong Creek	Mile 0.0 to Origin			X	X	X	X			
Wolf Creek	Mile 0.0 to Origin			X	X	X	X			
Eagle Creek	Mile 0.0 to Origin			X	X	X	X			
Morgan Creek	Mile 0.0 to Origin			X	X	X	X			
Beech River	Mile 0.0 to 7.2	X	X	X	X	X	X	X		
Beech River	Mile 7.2 to 27.4	X	X	X	X	X	X			
Beech River	Mile 27.4 to 30.4		X	X	X	X	X			
Beech River	Mile 30.4 to Origin	X	X	X	X	X	X			
Rushing Creek	Mile 0.0 to Origin			X	X	X	X			
Harmon Creek	Mile 0.0 to Origin			X	X	X	X			
Bear Creek	Mile 0.0 to Origin			X	X	X	X			
Wolf Creek	Mile 0.0 to Origin			X	X	X	X			
Doe Creek	Mile 0.0 to Origin			X	X	X	X			
East Prong Doe Creek	Mile 0.0 to Origin			X	X	X	X			
White Oak Creek	Mile 0.0 to Origin			X	X	X	X			
Little Hurricane Creek	Mile 0.0 to Origin			X	X	X	X			
Horse Creek	Mile 0.0 to Origin			X	X	X	X			
Beason Creek	Mile 0.0 to Origin			X	X	X	X			
South Fork Beason Creek	Mile 0.0 to Origin			X	X	X	X			
Dollar Creek	Mile 0.0 to Origin			X	X	X	X			
Beech Creek	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Leatherwood Creek	First bridge to origin			X	X	X	X		X	
E. Fork Leatherwood Cr	Mile 0.0 to second tributary			X	X	X	X		X	
N. Fork Leatherwood Cr	Mile 0.0 to second tributary			X	X	X	X		X	
Town Branch	Mile 0.0 to Origin			X	X	X	X			
Chambers Creek	Mile 0.0 to Origin			X	X	X	X			

All other surface waters named and unnamed in the Western Valley Tennessee River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

X X X X

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.05 Duck River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Duck River	Mile 0.0 to 67.0	X	X	X	X	X	X			
Blue Creek	Mile 0.0 to 14.0	X	X	X	X	X	X			
Blue Creek	Mile 14.0 to 16.2		X	X	X	X	X			
Blue Creek	Mile 16.2 to Origin			X	X	X	X			
Buffalo River	Mile 0.0 to 24.0	X	X	X	X	X	X			
Cane Creek	Hickman Co. line to Lewis Co. line			X	X	X	X		X	
Buffalo River	Mile 24.0 to 26.0		X	X	X	X	X			
Buffalo River	Mile 26.0 to 38.0	X	X	X	X	X	X			
Hurricane Creek	Mile 0.0 to Origin			X	X	X	X			X
Sinking Creek	Mile 0.0 to Origin			X	X	X	X		X	
Buffalo River	Mile 38.0 to 41.1		X	X	X	X	X			
Buffalo River	Mile 41.1 to Origin	X	X	X	X	X	X			
Green River	Mile 0.0 to 9.0	X	X	X	X	X	X			
Green River	Mile 9.0 to 11.7		X	X	X	X	X			
Green River	Mile 11.7 to Origin	X	X	X	X	X	X			
Rockhouse Creek	Mile 0.0 to 6.0	X	X	X	X	X	X			
Rockhouse Creek	Mile 6.0 to 9.5		X	X	X	X	X			
Rockhouse Creek	Mile 9.5 to Origin	X	X	X	X	X	X			
Little Buffalo River	Mile 0.0 to Origin			X	X	X	X		X	
Hurricane Creek	Mile 0.0 to Origin			X	X	X	X		X	
Beaverdam Creek	Highway 100 to Sulfur Fork Cr			X	X	X	X			X
Sulfur Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Piney River	Mile 0.0 to Origin	X	X	X	X	X	X			X
Mill Creek	Mile 0.0 to Origin	X		X	X	X	X		X	
Little Spring Creek	Mile 0.0 to Origin			X	X	X	X		X	
Big Spring Creek	Mile 0.0 to Origin			X	X	X	X			X
Garner Creek	Mile 0.0 to Origin			X	X	X	X		X	
Bear Creek	Mile 0.0 to Origin			X	X	X	X			X
East Piney River	Mile 0.0 to 4.0	X	X	X	X	X	X			
East Piney River	Mile 4.0 to 6.1		X	X	X	X	X			
East Piney River	Mile 6.1 to Origin	X	X	X	X	X	X			
Defeated Camp	Mile 0.0 to 4.4		X	X	X	X	X			
Creek										
Defeated Camp	Mile 4.4 to Origin			X	X	X	X			
Creek										
Defeated Branch	Mile 0.0 to Origin			X	X	X	X			
Duck River	Mile 67.0 to 71.5		X	X	X	X	X			
Duck River	Mile 71.5 to 123.2	X	X	X	X	X	X			
Big Bigby Creek	Mile 0.0 to Origin	X	X	X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Sugar Fork	Mile 0.0 to 1.9	X	X	X	X	X	X			
Sugar Fork	Mile 1.9 to 2.9		X	X	X	X	X			
Sugar Creek	Mile 0.0 to 0.7		X	X	X	X	X			
Sugar Creek	Mile 0.7 to Origin	X	X	X	X	X	X			
Quality Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Big Swan Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Little Swan Creek	Mile 0.0 to Origin			X	X	X	X		X	
Cathey's Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Duck River	Mile 123.2 to 127.2		X	X	X	X	X			
Little Bigby Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Rutherford Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Duck River	Mile 127.2 to 217.0	X	X	X	X	X	X			
Big Rock Creek	Mile 0.0 to 14.0	X	X	X	X	X	X			
Big Rock Creek	Mile 14.0 to 16.9		X	X	X	X	X			
Big Rock Creek	Mile 16.9 to Origin	X	X	X	X	X	X			
Duck River	Mile 217.0 to 221.3		X	X	X	X	X			
Duck River	Mile 221.3 to 244.0	X	X	X	X	X	X			
Duck River	Mile 244.0 to 248.6 (Normandy Dam)	X		X	X	X	X		X	
Duck River	Mile 248.6 to 266.5	X	X	X	X	X	X			
Garrison Fork Creek	Mile 0.0 to 2.7	X	X	X	X	X	X			
Garrison Fork Creek	Mile 2.7 to 3.3		X	X	X	X	X			
Garrison Fork Creek	Mile 3.3 to Origin	X	X	X	X	X	X			
Duck River	Mile 266.5 to 268.5		X	X	X	X	X			
Duck River	Mile 268.5 to Origin	X	X	X	X	X	X			
Little Duck River	Mile 0.0 to Origin	X	X	X	X	X	X			
All other surface waters named and unnamed in the Duck River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified				X	X	X	X			

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.06 Elk River Basin (including Shoal Creek).

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Shoal Creek	Tenn-Ala State Line (Mile 20.6) to Mile 56.9	X	X	X	X	X	X			
Clack Branch	Mile 0.0 to Origin		X	X	X	X	X			
Loretto Branch	Mile 0.0 to Origin		X	X	X	X	X			
Little Shoal Creek	Mile 0.0 to Origin		X	X	X	X	X			
Shoal Creek	Mile 56.9 to Origin (Jct of B. Dry Branch & Beeler Fk)		X	X	X	X	X		X	
Factory Creek	Mile 0.0 to Origin	X		X	X	X	X		X	
Chisholm Creek	Mile 0.0 to Origin			X	X	X	X		X	
Crowson Creek	Mile 0.0 to Origin			X	X	X	X			X
Elk River	Tenn-Ala State Line (Mile 33.6) to 36.3	X	X	X	X	X	X	X		
Elk River	Mile 36.3 to 90.5	X	X	X	X	X	X			
Richland Creek	Mile 0.0 to 20.0		X	X	X	X	X			
Buchannan Creek	Mile 0.0 to Origin			X	X	X	X			
Richland Creek	Mile 20.0 to 23.3			X	X		X			
Richland Creek	Mile 23.3 to Origin	X	X	X	X	X	X			
Pigeon Roost Creek	Mile 0.0 to Origin		X	X	X	X	X			
Robertson Fork	Mile 0.0 to Origin		X	X	X	X	X			
Town Creek	Mile 0.0 to Origin		X	X	X	X	X			
Holland Creek	Mile 0.0 to Origin		X	X	X	X	X			
Elk River	Mile 90.5 to 133.3 (Tims Ford Dam)	X	X	X	X	X	X		X	
Mulberry Creek	Mile 0.0 to Origin		X	X	X	X	X			
East Fork Mulberry Cr.	Mile 0.0 to 11.1		X	X	X	X	X			
East Fork Mulberry Cr.	Mile 11.1 to Origin	X	X	X	X	X	X			
Spring Branch	Mile 0.0 to Origin	X	X	X	X	X	X			
Elk River	Mile 133.3 to Origin	X	X	X	X	X	X			
Beans Creek	Mile 0.0 to Origin		X	X	X	X	X			
Factory Branch	Mile 0.0 to Origin		X	X	X	X	X			
Mathias Branch	Mile 0.0 to Origin		X	X	X	X	X			
Hurricane Creek	Mile 0.0 to Origin		X	X	X	X	X			
Boiling Fork Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Wagner Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Rock Creek	Mile 0.0 to Origin		X	X	X	X	X			
Rollins Creek	Mile 0.0 to 2.5	X	X	X	X	X	X			
Rollins Creek	Mile 2.5 to Origin			X	X	X	X			
Mud Creek	Mile 0.0 to Origin		X	X	X	X	X			
Caldwell Creek	Mile 0.0 to Origin		X	X	X	X	X			

STREAM

All other surface waters named and unnamed in the Elk River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
		X	X	X	X			

1200-04-04-.07 Lower Tennessee River Basin (including Conasauga River).

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Tennessee River	Tenn-Ala State Line (Mile 416.5) to the POT Light (Mile 448.0)	X	X	X	X	X	X	X		
Unnamed Tributary	At Tenn. River Mile 417.5; Mile 0.0 to Origin			X	X	X	X			
Battle Creek	Mile 0.0 to 17.3 (Martin Spring)	X	X	X	X	X	X		X	
Swedens Creek	Mile 0.0 to Origin			X	X	X	X		X	
Big Fiery Gizzard	Mile 0.0 to 4.5			X	X	X	X			
Little Fiery Gizzard	Mile 0.0 to Origin			X	X	X	X			
Unnamed Trib.	At Little Fiery Gizzard Mile 0.6; Mile 0.0 to Origin			X	X	X	X			
Big Fiery Gizzard	Mile 4.5 to 5.5			X	X	X	X		X	
Big Fiery Gizzard	Mile 5.5 to Origin			X	X	X	X			
Battle Creek	Mile 17.3 to Origin	X	X	X	X	X	X			
Sequatchie River	Mile 0.0 to 3.5	X	X	X	X	X	X	X		
Sequatchie River	Mile 3.5 to 41.0	X	X	X	X	X	X			
Little Sequatchie River	Mile 0.0 to confluence of Sawmill Creek			X	X	X	X			
Little Sequatchie River	Confluence of Sawmill Creek to confluence of Grays Creek		X	X	X	X		X		
Little Sequatchie River	Confluence of Grays Creek to Origin			X	X	X	X			
Pocket Creek	Mile 0.0 to Origin			X	X	X	X		X	
Clifty Creek	Mile 0.0 to Origin			X	X	X	X			
Sewanee Creek	Mile 0.0 to 4.0			X	X	X	X			
Sewanee Creek	Mile 4.0 to Origin	X		X	X	X	X			
Holywater Creek	Mile 0.0 to Origin	X		X	X	X	X			
Scott Creek	Mile 0.0 to Origin	X		X	X	X	X			
Coops Creek	Mile 0.0 to Origin			X	X	X	X			
Sequatchie River	Mile 41.0 to 43.9			X	X	X	X			
Sequatchie River	Mile 43.9 to 74.0	X	X	X	X	X	X			
Sequatchie River	Mile 74.0 to 78.4			X	X	X	X			
Sequatchie River	Mile 78.4 to 105.9	X	X	X	X	X	X			
Sequatchie River	Mile 105.9 to 108.9	X	X	X	X	X	X		X	
Sequatchie River	108.8 to Origin			X	X	X	X			
Tennessee River	Mile 448.0 to 460.6 (Chattanooga Creek)		X	X	X	X	X	X		
Shoal Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Tributary	At Tenn. River Mile 458.7; Mile 0.0 to Origin			X	X	X	X			
Lookout Creek	Mile 0.0 to Georgia-Tenn State Line		X	X	X	X	X			
Black Creek	Mile 0.0 to Origin			X	X	X	X			
Chattanooga Creek	Mile 0.0 to Georgia-Tenn State Line		X	X	X	X	X			
Tennessee River	Mile 460.6 to 499.4 (Hiwassee)	X	X	X	X	X	X	X		
Citico Creek	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
South Chickamauga Creek	Mile 0.0 to Georgia-Tenn State Line		X	X	X	X	X			
Friar Branch	Mile 0.0 to Origin			X	X	X	X			
West Chickamauga Creek	Mile 0.0 to Georgia-Tenn State Line		X	X	X	X	X			
Spring Creek	Mile 0.0 to Georgia-Tenn State Line		X	X	X	X	X			
Mackey Branch	Mile 0.0 to Origin			X	X	X	X			
Ryall Springs Br.	Mile 0.0 to Origin			X	X	X	X			
Unnamed Tributary	At Tenn. River Mile 469.2; Mile 0.0 to Origin			X	X	X	X			
North Chickamauga Creek	Mile 0.0 to 13.2			X	X	X	X			
Unnamed Tributary	At N. Chickamauga Creek Mile 0.7; Mile 0.0 to Origin			X	X	X	X			
North Chickamauga Creek	Mile 13.2 to 15.0			X	X	X	X		X	
North Chickamauga Creek	Mile 15.0 to Origin			X	X	X	X			
Wolftever Creek	Mile 0.0 to Origin			X	X	X	X			
Sale Creek	Mile 0.0 to Origin			X	X	X	X			
Roaring Creek	Mile 0.0 to Origin			X	X	X	X			
Brush Creek	Mile 0.0 to Origin			X	X	X	X			
Hiwassee River	Mile 0.0 to 23.9	X	X	X	X	X	X	X		
Candies Creek	Mile 0.0 to Origin			X	X	X	X			
South Mouse Creek	Mile 0.0 to Origin			X	X	X	X			
Chatata Creek	Mile 0.0 to Origin			X	X	X	X			
Little Chatata Cr.	Mile 0.0 to Origin			X	X	X	X			
Chestuee Creek	Mile 0.0 to Origin			X	X	X	X			
Middle Creek	Mile 0.0 to 1.9			X	X	X	X			
Middle Creek	Mile 1.9 to Origin	X		X	X	X	X			
Ocoee River	Mile 0.0 to Benton Station Bridge	X	X	X	X	X	X		X	
Ocoee River	Benton Station Bridge to mile 17.0	X	X	X	X	X	X			
Sylco Creek	Mile 0.0 to Origin			X	X	X	X		X	
Dutch Creek	Mile 0.0 to Origin			X	X	X	X		X	
Greasy Creek	Mile 0.0 to Origin			X	X	X	X			
Rock Creek	Mile 0.0 to Origin			X	X	X	X		X	
Clear Creek	Mile 0.0 to Origin			X	X	X	X		X	
Ocoee River	Mile 17.0 to Ocoee #3 Powerhouse		X	X	X	X	X			
Caney Creek (East Fork)	Mile 0.0 to Origin			X	X	X	X		X	
Big Creek	Mile 0.0 to Origin			X	X	X	X			X
Goforth Creek	Mile 0.0 to Origin			X	X	X	X		X	
Ocoee River	Ocoee #3 Powerhouse to Rock Creek		X	X	X	X	X		X	
Rock Creek	Mile 0.0 to Origin			X	X	X	X		X	
Ocoee River	Rock Creek to mile 37.9 (Georgia-Tenn State Line)		X	X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Rough Creek	Mile 0.0 to Origin			X	X	X	X			X
West Fork Rough Creek	Mile 0.0 to Origin			X	X	X	X			X
North Potato Creek	Mile 0.0 to North Carolina-Tenn State Line)			X	X	X	X			
Burra Creek	Mile 0.0 to 1.5			X	X	X	X			
Brush Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Belcher Creek	Mile 0.0 to Origin			X	X	X	X			
Deweese Creek	Mile 0.0 to Origin	X		X	X	X	X			
Conasauga Creek	Mile 0.0 to Cog Hill Mill Dam			X	X	X	X		X	
Conasauga Creek	Cog Hill Mill Dam to Ruralville Mill			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	Mile 0.0 to Origin			X	X	X	X			
Crockett Spring Cr	Mile 0.0 to Origin			X	X	X	X			
Conasauga Creek	Ruralville Mill to Origin			X	X	X	X		X	
Gee Creek	Mile 0.0 to Origin			X	X	X	X			X
Spring Creek	Mile 0.0 to Origin			X	X	X	X			
Yellow Creek	Mile 0.0 to Origin			X	X	X	X		X	
Big Lost Creek	Mile 0.0 to Origin			X	X	X	X		X	
Little Lost Creek	Mile 0.0 to Origin			X	X	X	X		X	
Smith Creek	Mile 0.0 to Origin			X	X	X	X		X	
Wolf Creek	Mile 0.0 to Origin			X	X	X	X			X
Turtletown Creek	Mile 0.0 to N. Carolina Line			X	X	X	X		X	
Brushy Creek	Mile 0.0 to N. Carolina Line			X	X	X	X		X	
Coker Creek	Joe Brown Highway to Origin			X	X	X	X		X	
Hiwassee River	Mile 23.9 to 34.4	X	X	X	X	X	X	X		
North Mouse Creek	Mile 0.0 to 10.0	X	X	X	X	X	X			
Spring Creek	Mile 0.0 to 18.7		X	X	X	X	X			
Spring Creek	Mile 18.7 to Origin			X	X	X	X			
Dry Valley Creek	Mile 0.0 to Origin			X	X	X	X			
North Mouse Creek	Mile 10.0 to 30.1		X	X	X	X	X			
Little North Mouse Cr.	Mile 0.0 to 4.1			X	X	X	X			
Little North Mouse Cr.	Mile 4.1 to Origin			X	X	X	X			
North Mouse Creek	Mile 30.1 to Origin			X	X	X	X			
Oostanaula Creek	Mile 0.0 to 26.0	X	X	X	X	X	X			
Oostanaula Creek	Mile 26.0 to 28.0		X	X	X	X	X			
Oostanaula Creek	Mile 28.0 to 33.8		X	X	X	X	X			
Oostanaula Creek	Mile 33.8 to 37.5	X	X	X	X	X	X			
Oostanaula Creek	Mile 37.5 to Origin			X	X	X	X			
Hiwassee River	Mile 34.4 to 64.9 (North Carolina Line)	X	X	X	X	X	X		X	
All other surface waters named and unnamed in the Lower Tennessee River Basin, with the exception of wet weather						X	X			

conveyances, which have not been specifically noted shall be classified

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.08 Upper Tennessee River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Tennessee River	Mile 499.4 (Hiwassee) to 567.8 (Clinch)	X	X	X	X	X	X	X		
Richland Creek	Mile 0.0 to Origin		X	X	X	X	X			
Little Richland Creek	Mile 0.0 to Origin		X	X	X	X	X			
Broyles Branch	Mile 0.0 to Origin		X	X	X	X	X			
Piney River	Mile 0.0 to 5.5		X	X	X	X	X	X		
Piney River	Mile 5.5 to 6.5 (U.S. Hwy. 27 Bridge)	X	X	X	X	X	X			
Piney River	Mile 6.5 to Origin		X	X	X	X	X			
Town Creek	Mile 0.0 to Origin		X	X	X	X	X			
Whites Creek	Mile 0.0 to 5.1			X	X	X	X	X		
Whites Creek	Mile 5.1 to Origin			X	X	X	X			
Black Creek	Mile 0.0 to Origin			X	X	X	X			
Caney Creek	Mile 0.0 to Origin			X	X	X	X			
Post Oak Creek	Mile 0.0 to Origin			X	X	X	X			
Cardiff Creek	Mile 0.0 to Origin			X	X	X	X			
Clear Creek	Mile 0.0 to 3.0			X	X	X	X		X	
Tennessee River	Mile 567.8 to 601.1	X	X	X	X	X	X	X		
Martin Branch	Mile 0.0 to Origin			X	X	X	X			
Stamp Creek	Mile 0.0 to Origin			X	X	X	X			
Greenbriar Branch	Mile 0.0 to Origin			X	X	X	X			
Hines Creek	Mile 0.0 to Origin			X	X	X	X			
Sweetwater Creek	Mile 0.0 to 9.4	X	X	X	X	X	X			
Bacon Creek	Mile 0.0 to Origin			X	X	X	X			
Sweetwater Creek	Mile 9.4 to 19.0			X	X	X	X			
Sweetwater Creek	Mile 19.0 to 21.0	X		X	X	X	X			
Sweetwater Creek	Mile 21.0 to Origin	X	X	X	X	X	X			
Unnamed Spring Branch	Mile 0.0 to Origin			X	X	X	X			
Little Tennessee River	Mile 0.0 to 19.0	X	X	X	X	X	X	X		
Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Tributary	Mile 0.0 to Origin			X	X	X	X			
Bat Creek	Mile 0.0 to Origin			X	X	X	X			
Tellico River	Mile 0.0 to 5.0	X	X	X	X	X	X	X		
Tellico River	Mile 5.0 to 28.0	X	X	X	X	X	X			
Ballplay Creek	Upper 7 miles			X	X	X	X		X	
Cane Creek	Mile 0.0 to Origin			X	X	X	X		X	
Tellico River	Mile 28.0 to 41.0	X		X	X	X	X		X	
Wildcat Creek	Mile 0.0 to Origin			X	X	X	X		X	
Turkey Creek	Mile 0.0 to Origin			X	X	X	X		X	

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Bald River	Mile 0.0 to Origin			X	X	X	X			X
Kirkland Creek	Mile 0.0 to Origin			X	X	X	X			X
Henderson Creek	Mile 0.0 to Origin			X	X	X	X			X
Barrett Branch	Mile 0.0 to Origin			X	X	X	X			X
Service Branch	Mile 0.0 to Origin			X	X	X	X			X
Brookshire Branch	Mile 0.0 to Origin			X	X	X	X			X
North River	Mile 0.0 to Origin			X	X	X	X			X
Long Branch	Mile 0.0 to Origin			X	X	X	X		X	
Hemlock Branch	Mile 0.0 to Origin			X	X	X	X		X	
McNabb Creek	Mile 0.0 to Origin			X	X	X	X			X
Laurel Branch	Mile 0.0 to Origin			X	X	X	X			X
Big Cove Branch	Mile 0.0 to Origin			X	X	X	X			X
Round Mountain Br	Mile 0.0 to Origin			X	X	X	X			X
Service Tree Br	Mile 0.0 to Origin			X	X	X	X			X
Sugar Cove Br	Mile 0.0 to Origin			X	X	X	X			X
Meadow Branch	Mile 0.0 to Origin			X	X	X	X			X
Roaring Br	Mile 0.0 to Origin			X	X	X	X			X
Indian Creek	Mile 0.0 to Origin			X	X	X	X			X
Panther Branch	Mile 0.0 to Origin			X	X	X	X			X
Tellico River	Mile 41.0 to 50.0 (TN - NC Line)	X	X	X	X	X	X			X
Sycamore Creek	Mile 0.0 to Origin			X	X	X	X			X
Rough Ridge Creek	Mile 0.0 to Origin			X	X	X	X			X
Little Tennessee River	Mile 19.0 to 30.0	X	X	X	X	X	X	X	X	
Citico Creek	Mile 4.5 to 16.0			X	X	X	X		X	
Jakes Creek	Mile 0.0 to 3.0			X	X	X	X			X
Slide Hollow	Mile 0.0 to 2.0			X	X	X	X		X	
Little Citico Creek	Mile 0.0 to 3.5			X	X	X	X			X
Jake Best Creek	Mile 0.0 to Origin			X	X	X	X			X
Doublecamp Creek	Mile 0.0 to Origin			X	X	X	X			X
Mill Branch	Mile 0.0 to Origin			X	X	X	X			X
Flint Branch	Mile 0.0 to Origin			X	X	X	X			X
Crowder Branch	Mile 0.0 to Origin			X	X	X	X			X
Citico Creek	Mile 16.0 to Origin			X	X	X	X			X
N. Fk Citico Creek	Mile 0.0 to Origin			X	X	X	X			X
Indian Valley Br	Mile 0.0 to Origin			X	X	X	X			X
South Fork Citico Creek	Mile 0.0 to Origin			X	X	X	X			X
Ike Camp Branch	Mile 0.0 to Origin			X	X	X	X			X
Falls Branch	Mile 0.0 to Origin			X	X	X	X			X
Cochran Creek	Mile 0.0 to mile 2.0			X	X	X	X		X	
Abrams Creek	Mile 0.0 to Origin			X	X	X	X			X
Panther Creek	Mile 0.0 to Origin			X	X	X	X			X

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Mill Creek	Mile 0.0 to Origin			X	X	X	X			X
Bell Cove Branch	Mile 0.0 to Origin			X	X	X	X		X	
Kingfisher Creek	Mile 0.0 to Origin			X	X	X	X		X	
Buckshank Branch	Mile 0.0 to Origin			X	X	X	X		X	
Rabbit Creek	Mile 0.0 to Origin			X	X	X	X			X
Hannah Branch	Mile 0.0 to Origin			X	X	X	X			X
Peckerwood Br	Mile 0.0 to Origin			X	X	X	X			X
Wilson Branch	Mile 0.0 to Origin			X	X	X	X		X	
Stony Branch	Mile 0.0 to Origin			X	X	X	X		X	
Arbutus Branch	Mile 0.0 to Origin			X	X	X	X		X	
Mill Creek	Mile 0.0 to Origin			X	X	X	X			X
Forge Creek	Mile 0.0 to Origin			X	X	X	X			X
Coalen Ground Br	Mile 0.0 to Origin			X	X	X	X		X	
Bower Creek	Mile 0.0 to Origin			X	X	X	X			X
Tipton Sugar Cove	Mile 0.0 to Origin			X	X	X	X		X	
Ekanneetlee Br	Mile 0.0 to Origin			X	X	X	X			X
Tater Branch	Mile 0.0 to Origin			X	X	X	X		X	
McCaulley Branch	Mile 0.0 to Origin			X	X	X	X		X	
Rowans Branch	Mile 0.0 to Origin			X	X	X	X			X
Anthony Creek	Mile 0.0 to Origin			X	X	X	X			X
Shop Creek	Mile 0.0 to Origin			X	X	X	X			X
Tabcat Creek	Mile 0.0 to Origin			X	X	X	X			X
Parson Branch	Mile 0.0 to Origin			X	X	X	X			X
Bible Creek	Mile 0.0 to Origin			X	X	X	X			X
Slickrock Creek	Tennessee portion			X	X	X	X			X
Little Slickrock Cr	Mile 0.0 to Origin			X	X	X	X			X
Little Tennessee River	Mile 30.0 to 49.7 (TN.-N.C. Line)	X	X	X	X	X	X		X	
Morgan Branch	Mile 0.0 to Origin			X	X	X	X			
Abrams Branch	Mile 0.0 to Origin			X	X	X	X			
First Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Tennessee River	Mile 601.1 to 636.6 (Little River)	X	X	X	X	X	X	X		
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Gallagher Creek	Mile 0.0 to Origin			X	X	X	X			
Turkey Creek	Mile 0.0 to Origin			X	X	X	X			
Sinking Creek #1	Mile 0.0 to Origin	X	X	X	X	X	X			
Ten Mile Creek	From Sink to Origin			X	X	X	X			
Sinking Creek #2	Mile 0.0 to Origin			X	X	X	X			
Unnamed Trib.	Mile 0.0 to Origin			X	X	X	X			
Lackey Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Little River	Mile 0.0 to 33.0	X	X	X	X	X	X			
Polecat Branch	Mile 0.0 to Origin			X	X	X	X			
Stock Creek	Mile 0.0 to Origin			X	X	X	X			
McCall Branch	Mile 0.0 to Origin			X	X	X	X			
Russell's Branch	Mile 0.0 to Origin			X	X	X	X			
Pistol Creek	Mile 0.0 to Origin			X	X	X	X			
Duncan Branch	Mile 0.0 to Origin			X	X	X	X			
Culton Creek	Mile 0.0 to Origin			X	X	X	X			
Tedford Br	Mile 0.0 to Origin			X	X	X	X			
Hesse Creek	Upper 5 miles			X	X	X	X		X	
Cane Creek	Upper 2.0 miles			X	X	X	X		X	
Beard Cane Cr	Upper 1.5 miles			X	X	X	X		X	
Little River	Mile 33.0 to Origin	X		X	X	X	X			X
M. Pr. Little River	Mile 0.0 to Origin			X	X	X	X			X
W. Prong Little R.	Mile 0.0 to Origin			X	X	X	X			X
Laurel Creek	Mile 0.0 to Origin			X	X	X	X			X
Meadow Br	Mile 0.0 to Origin			X	X	X	X			X
Spruce Flats Br	Mile 0.0 to Origin			X	X	X	X			X
Sams Creek	Mile 0.0 to Origin			X	X	X	X			X
Thunderhead Pr	Mile 0.0 to Origin			X	X	X	X			X
Shut-in Cr	Mile 0.0 to Origin			X	X	X	X			X
Lynn Camp Prong	Mile 0.0 to Origin			X	X	X	X			X
Marks Creek	Mile 0.0 to Origin			X	X	X	X			X
Meigs Creek	Mile 0.0 to Origin			X	X	X	X			X
Little Greenbriar Creek	Mile 0.0 to Origin			X	X	X	X			X
Mannis Branch	Mile 0.0 to Origin			X	X	X	X			X
Blanket Creek	Mile 0.0 to Origin			X	X	X	X			X
Shields Branch	Mile 0.0 to Origin			X	X	X	X			X
Jakes Creek	Mile 0.0 to Origin			X	X	X	X			X
Newt Prong	Mile 0.0 to Origin			X	X	X	X			X
Laurel Branch	Mile 0.0 to Origin			X	X	X	X			X
Fish Camp Prong	Mile 0.0 to Origin			X	X	X	X			X
Goshen Prong	Mile 0.0 to Origin			X	X	X	X			X
Silers Prong	Mile 0.0 to Origin			X	X	X	X			X
Rich Branch	Mile 0.0 to Origin			X	X	X	X			X
Rough Creek	Mile 0.0 to Origin			X	X	X	X			X
Meigs Post Prong	Mile 0.0 to Origin			X	X	X	X			X
Grouse Creek	Mile 0.0 to Origin			X	X	X	X			X
Tennessee River	Mile 636.6 to 638.6	X	X	X	X	X	X	X		
Tennessee River	Mile 638.6 to 640.0		X	X	X	X	X	X		
Tennessee River	Mile 640.0 to 643.4	X	X	X	X	X	X	X		
Tennessee River	Mile 643.4 to 646.4		X	X	X	X	X	X		

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Tennessee River	Mile 646.4 to 652.2	X	X	X	X	X	X	X		
Knob Creek	Mile 0.0 to Origin			X	X	X	X			
Flenniken Branch	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	Mile 0.0 to Origin			X	X	X	X			
Fourth Creek	Mile 0.0 to Origin			X	X	X	X			
Third Creek	Mile 0.0 to 4.9			X	X	X	X			
Third Creek	Mile 4.9 to Origin	X	X	X	X	X	X			
Second Creek	Mile 0.0 to Origin		X	X	X	X	X			
First Creek	Mile 0.0 to Origin			X	X	X	X			

All other surface water named and unnamed in the Upper Tennessee River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

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Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.09 Clinch River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Clinch River	Mile 0.0 to 4.4 (Emory River)	X	X	X	X	X	X	X		
Emory River	Mile 0.0 to Origin	X	X	X	X	X	X			
Little Emory River	Mile 0.0 to Origin	X	X	X	X	X	X			
Middle Fork Little Emory River	Mile 0.0 to Origin			X	X	X	X			
Davis Branch	Mile 0.0 to 0.2			X	X	X	X			
Unnamed Tributary	At Emory River (Mile 16.4); Mile 0.0 to 1.0			X	X	X	X			
Crooked Fork Creek	Mile 0.0 to 4.9			X	X	X	X			
Unnamed Tributary	At Crooked Fork Creek (Mile 4.9); Mile 0.0 to Origin			X	X	X	X			
Crooked Fork Creek	Mile 4.9 to Origin	X		X	X	X	X			
Flat Fork Creek	Mile 0.0 to Origin	X		X	X	X	X		X	
Unnamed Tributary	At Flat Fork (Mile 2.3); Mile 0.0 to Origin			X	X	X	X		X	
Stockstill Creek	Mile 0.0 to Origin			X	X	X	X			
Obed River	Mile 0.0 to 40.1			X	X	X	X			
Daddy's Creek	Mile 0.0 to Origin			X	X	X	X			
Basses Creek	Mile 0.0 to Origin			X	X	X	X			
Fox Creek	Mile 0.0 to Origin			X	X	X	X			
Scantling Branch	Mile 0.0 to Origin			X	X	X	X			
Unnamed Trib.	At Scantling Branch (Mile 1.2); Mile 0.0 to Origin			X	X	X	X			
Unnamed Tributary	At Obed River (Mile 34.6); Mile 0.0 to Origin			X	X	X	X			
Obed River	Mile 40.1 to Origin	X	X	X	X	X	X			
Unnamed Tributary	At Obed River (Mile 45.4); Mile 0.0 to Origin			X	X	X	X			
Climch River	Mile 4.4 to 12.0 (Poplar Creek)	X	X	X	X	X	X	X		
Poplar Creek	Mile 0.0 to 0.5		X	X	X	X	X			
Poplar Creek	Mile 0.5 to Origin			X	X	X	X			
East Fork Poplar Creek	Mile 0.0 to Origin			X	X	X	X			
Bear Creek	Mile 0.0 to Origin			X	X	X	X			
Indian Creek	At Poplar Creek (Mile 14.3); Mile 0.0 to Origin			X	X	X	X			
Climch River	Mile 12.0 to 20.0	X	X	X	X	X	X			
White Oak Creek	Mile 0.0 to Origin			X	X		X			
Melton Branch	Mile 0.0 to Origin			X	X		X			
Climch River	Mile 20.0 to 39.6	X	X	X	X	X	X	X		

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Beaver Creek	Mile 0.0 to 8.4	X	X	X	X	X	X			
Beaver Creek	Mile 8.4 to 10.4		X	X	X	X	X			
Beaver Creek	Mile 10.4 to 17.5	X	X	X	X	X	X			
Beaver Creek	Mile 17.5 to 17.9		X	X	X	X	X			
Beaver Creek	Mile 17.9 to 21.6	X	X	X	X	X	X			
Beaver Creek	Mile 21.6 to 23.6			X	X	X	X			
Beaver Creek	Mile 23.6 to 29.4	X	X	X	X	X	X			
Beaver Creek	Mile 29.4 to 31.4			X	X	X	X			
Beaver Creek	Mile 31.4 to Origin	X	X	X	X	X	X			
Unnamed Tributary	At Beaver Creek (Mile 44.1); Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 39.6 to 41.1	X	X	X	X	X	X	X		
Scarboro Creek	Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 41.1 to 46.7	X	X	X	X	X	X	X		
Bull Run Creek	Mile 0.0 to 1.0			X	X	X	X			
Bull Run Creek	Mile 1.0 to Origin	X		X	X	X	X			
Nelson Branch	Mile 0.0 to Origin			X	X	X	X			
Blaze Branch	At Nelson Branch (Mile 5.0); Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 46.7 to 47.8	X	X	X	X	X	X	X		
Worthington Branch	At Clinch River (Mile 47.8); Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 47.8 to 50.7	X	X	X	X	X	X	X		
Braden Branch	At Clinch River (Mile 50.7); Mile 0.0 to 1.7			X	X		X			
Braden Branch	Mile 1.7 to Origin			X	X	X	X			
Clinch River	Mile 50.7 to 51.1	X	X	X	X	X	X	X		
Unnamed Tributary	At Clinch River (Mile 51.1); Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 51.1 to 61.5	X	X	X	X	X	X	X		
Clinch River	Mile 61.5 to 66.2	X	X	X	X	X	X			
Hinds Creek	At Clinch River (Mile 65.0); Mile 0.0 to Origin			X	X	X	X			
Buffalo Creek	Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 66.2 to 79.8	X	X	X	X	X	X		X	
Cane Creek	At Clinch River (Mile 71.3); Mile 0.0 to Origin			X	X	X	X			
Blowing Spring	At Cane Creek (Mile 1.9); Mile 0.0 to Origin			X	X	X	X			
Fork										
Coal Creek	At Clinch River (Mile 75.0); Mile 0.0 to Origin			X	X	X	X		X	
Unnamed Tributary	At Coal Creek (Mile 8.6); Mile 0.0 to Origin			X	X	X	X			
Clinch River	Mile 79.8 to 202.1 (Virginia Stateline)	X	X	X	X	X	X			
Cove Creek	Mile 0.0 to 15.1	X	X	X	X	X	X			
Unnamed Tributary	At Cover Creek (Mile 13.7); Mile 0.0 to Origin			X	X	X	X			
Cove Creek	Mile 15.1 to 16.1		X	X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Cove Creek	Mile 16.1 to Origin	X	X	X	X	X	X			
Bruce (Brush) Creek	Mile 0.0 to Origin			X	X	X	X			
Dog Creek	At Bruce Creek (Mile 0.9); Mile 0.0 to Origin			X	X	X	X			
Unnamed	At Dog Creek (Mile 2.0); Mile 0.0 to Origin			X	X	X	X			
Trib.										
Big Creek	At Clinch River (Mile 83.0); Mile 0.0 to 15.6	X	X	X	X	X	X			
Big Creek	Mile 15.6 to 17.6		X	X	X	X	X			
Big Creek	Mile 17.6 to Origin			X	X	X	X			
Ollis Creek	At Big Creek (Mile 20.4); Mile 0.0 to Origin	X	X	X	X	X	X			
Powell River	At Clinch River (Mile 88.8); Mile 0.0 to 115.7	X	X	X	X	X	X			
Gap Creek	At Powell River (Mile 57.7); Mile 0.0 to Origin			X	X	X	X			
Unnamed Spring	From Sinkhole to Origin			X	X	X	X			
Br.										
Russell Creek	At Powell River (Mile 82.4); Mile 0.0 to Origin			X	X	X	X			
Clear Creek	Mile 0.0 to 2.0			X	X	X	X		X	
White Creek	Mile 0.0 to 2.0			X	X	X	X		X	
Mill Creek	At Clinch River (Mile 98.0); Mile 0.0 to Origin			X	X	X	X			
Byram's Creek	At Mill Creek (Mile 0.5); Mile 0.0 to Origin			X	X	X	X			
Unnamed	At Byram's Creek (Mile 2.3); Mile 0.0 to Origin			X	X	X	X			
Tributary										
Ball Creek	Mile 0.0 to Origin	X		X	X	X	X		X	
Poorland Creek	At Clinch River (Mile 104.2); Mile 0.0 to Origin			X	X	X	X			
Dry Tributary	At Poorland Creek (Mile 2.5); Mile 0.0 to Waste Outfall			X	X		X			
Hunting Creek	At Clinch River (Mile 118.3); Mile 0.0 to Origin			X	X	X	X			
Unnamed	At Hunting Creek (Mile 2.0); Mile 0.0 to Origin			X	X	X	X			
Tributary										
Big War Creek	At Clinch River (Mile 164.4); Mile 0.0 to 8.0			X	X	X	X			
Flat Gap Creek	At Big War Branch (Mile 7.0); Mile 0.0 to Origin			X	X	X	X			
Big War Creek	Mile 8.0 to Origin			X	X	X	X			
North Fork Clinch River	At Clinch River (Mile 192.0); Mile 0.0 to 2.2			X	X	X	X		X	
		X	X	X	X	X	X			
All other surface waters named and unnamed in the Clinch River Basin, with the exception of wet weather conveyances, which have not been specifically treated shall be classified						X	X	X	X	

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.10 French Broad River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
French Broad River	Mile 0.0 to 102.2 (N. Carolina-Tenn Line)	X	X	X	X	X	X			
Hines Creek	Mile 0.0 to Origin		X	X	X	X	X			
Unnamed Tributary	At Hines Creek (Mile 1.7)			X	X		X			
Unnamed Tributary	At Hines Creek (Mile 3.7)			X	X		X			
Cement Mill Creek	Mile 0.0 to Origin		X	X	X	X	X			
Boyd's Creek	Mile 0.0 to Origin		X	X	X	X	X			
Unnamed Tributary	At Boyd's Creek (Mile 9.7)			X	X		X			
Unnamed Tributary	At Boyd's Creek (Mile 11.5)			X	X		X			
Little Pigeon River	Mile 0.0 to 2.9	X	X	X	X	X	X			
Gist (Guess) Creek	Mile 0.0 to Origin			X	X	X	X			
Little Pigeon River	Mile 2.9 to 4.8		X	X	X	X	X			
W. Prong Little Pigeon R.	Mile 0.0 to 4.5	X	X	X	X	X	X			
W. Prong Little Pigeon R.	Mile 4.5 to 7.9	X	X	X	X	X	X		X	
W. Prong Little Pigeon R.	Mile 7.9 to 8.8		X	X	X	X	X		X	
W. Prong Little Pigeon R.	Mile 8.8 to 13.0	X	X	X	X	X	X		X	
W. Prong Little Pigeon R.	Mile 13.0 to 14.0		X	X	X	X	X		X	
W. Prong Little Pigeon R.	Mile 14.0 to 19.0		X	X	X	X	X		X	
Dudley Creek	Mile 0.0 to Origin			X	X	X	X		X	
Little Dudley Creek	Mile 0.0 to Origin			X	X	X	X		X	
Roaring Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Baskins Creek	Mile 0.0 to Origin			X	X	X	X		X	
Norton Creek	Mile 0.0 to Origin			X	X	X	X			X
Leconte Creek	Mile 0.0 to Origin			X	X	X	X		X	
W. Prong Little Pigeon R.	Mile 19.0 to Origin	X		X	X	X	X			X
Twomile Creek	Mile 0.0 to Origin			X	X	X	X			X
Fighting Creek	Mile 0.0 to Origin			X	X	X	X			X
Sugarland Branch	Mile 0.0 to Origin			X	X	X	X			X
Big Branch	Mile 0.0 to Origin			X	X	X	X			X
Road Prong	Mile 0.0 to Origin			X	X	X	X			X
Cole Branch	Mile 0.0 to Origin			X	X	X	X			X
Alum Cave Creek	Mile 0.0 to Origin			X	X	X	X			X
Walker Camp Pr	Mile 0.0 to Origin			X	X	X	X			X
Little Pigeon River	Mile 4.8 to 20.3	X	X	X	X	X	X			
Little Pigeon River	Mile 20.3 to Origin	X		X	X	X	X		X	
E.F. Little Pigeon R.	Mile 0.0 to Origin	X	X	X	X	X	X			
Dunn Creek	Mile 0.0 to 15.8	X	X	X	X	X	X		X	
Dunn Creek	Mile 15.8 to Origin	X	X	X	X	X	X			X

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Ogle Springs Br	Mile 0.0 to Origin			X	X	X	X			
Bird Creek	Mile 0.0 to Origin			X	X	X	X			
Webb Creek	Mile 0.0 to Great Smoky Mtns Pk Boundary (Mile 5.8)			X	X	X	X		X	
Soak Ash Creek	Mile 0.0 to Origin			X	X	X	X			X
Timothy Creek	Mile 0.0 to Origin			X	X	X	X			X
Redwine Creek	Mile 0.0 to Origin			X	X	X	X			X
Noisy Creek	Mile 0.0 to Origin			X	X	X	X			X
Texas Creek	Mile 0.0 to Origin			X	X	X	X			X
Webb Creek	Great Smoky Mts boundary to origin			X	X	X	X			X
Copeland Creek	Mile 0.0 to Origin			X	X	X	X		X	
Injun Creek	Mile 0.0 to Origin			X	X	X	X		X	
Rhododendron Creek	Mile 0.0 to Origin			X	X	X	X		X	
Porters Creek	Mile 0.0 to Origin			X	X	X	X		X	
False Gap Prong	Mile 0.0 to Origin			X	X	X	X		X	
Kalanu Prong	Mile 0.0 to Origin			X	X	X	X		X	
Long Branch	Mile 0.0 to Origin			X	X	X	X		X	
Cannon Creek	Mile 0.0 to Origin			X	X	X	X		X	
Lowes Creek	Mile 0.0 to Origin			X	X	X	X		X	
Boulevard Prong	Mile 0.0 to Origin			X	X	X	X		X	
Shutts Prong	Mile 0.0 to Origin			X	X	X	X		X	
Middle Prong Little	Mile 0.0 to Origin			X	X	X	X		X	
Pigeon										
Ramsey Prong	Mile 0.0 to Origin			X	X	X	X		X	
Chapman Prong	Mile 0.0 to Origin			X	X	X	X		X	
Eagle Rocks	Mile 0.0 to Origin			X	X	X	X		X	
Branch										
Lost Prong	Mile 0.0 to Origin			X	X	X	X		X	
Buck Fork	Mile 0.0 to Origin			X	X	X	X		X	
Muddy Creek	Mile 0.0 to Origin			X	X	X	X			
Clear Creek	Mile 0.0 to Origin	X		X	X	X	X			
City Spring Tributary	Mile 0.0 to Origin			X	X	X	X			
Indian Creek	Mile 0.0 to Origin			X	X	X	X			
Ball Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Tributary	At Ball Creek (Mile 2.9); Mile 0.0 to Origin			X	X		X			
Leadvale Creek	Mile 0.0 to Origin			X	X	X	X			
Clear Creek	Mile 0.0 to Origin			X	X	X	X			
Nolichucky River	Mile 0.0 to 5.3	X	X	X	X	X	X			
Long Creek	Mile 0.0 to Origin			X	X	X	X			
Sinking Creek	Mile 0.0 to Origin			X	X	X	X			
Nolichucky River	Mile 5.3 to 7.7		X	X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Nolichucky River	Mile 7.7 to 100.8 (N. Carolina-Tenn Line)	X	X	X	X	X	X			
Slate Creek	Mile 0.0 to Origin			X	X	X	X			
Bent Creek	Mile 0.0 to Origin			X	X	X	X			
Mud Creek	Mile 0.0 to Origin			X	X	X	X			
Williams Branch	Mile 0.0 to Origin			X	X	X	X			
Lick Creek	Mile 0.0 to 49.0		X	X	X	X	X			
Lick Creek	Mile 49.0 to Origin	X	X	X	X	X	X			
Black Creek	Mile 0.0 to Origin			X	X	X	X			
War Branch	Mile 0.0 to 0.5			X	X	X	X			
Unnamed Tributary	At Lick Creek (Mile 36.1); Mile 0.0 to Origin			X	X		X			
Little Chucky Creek	Mile 0.0 to Origin			X	X	X	X			
Mosheim Branch	Mile 0.0 to Origin			X	X	X	X			
Unnamed Trib.	At Mosheim Branch (Mile 2.0); Mile 0.0 to Origin			X	X		X			
Unnamed Tributary	At Little Chucky Creek (Mile 17.2); Mile 0.0 to Origin			X	X	X	X			
Gap Creek	Mile 0.0 to Origin			X	X	X	X			
Furness Branch	Mile 0.0 to Origin			X	X	X	X			
Cove Creek	Mile 0.0 to Origin			X	X	X	X			
Flag Branch	Mile 0.0 to Origin			X	X	X	X			
Richland Creek	Mile 0.0 to Origin		X	X	X	X	X			
Crazy Creek	Sinkhole to Origin			X	X	X	X			
Unnamed Tributary	At Crazy Creek (Mile 1.3); Mile 0.0 to 0.5			X	X	X	X			
Unnamed Tributary	Mile 0.5 to Origin			X	X		X			
Camp Creek	Mile 0.0 to Origin		X	X	X	X	X			X
Jennings Creek	Mile 0.0 to Origin			X	X	X	X			X
Dry Creek	Mile 0.0 to 1.3			X	X	X	X			
Dry Creek	Mile 1.3 to Origin			X	X	X	X			X
Davis Creek	Mile 0.0 to Origin			X	X	X	X			X
College Creek	Mile 0.0 to Origin			X	X	X	X			
Moon Creek	Mile 0.0 to Origin			X	X	X	X			
Sinking Creek	Mile 0.0 to Origin			X	X	X	X			
Little Limestone Creek	Mile 0.0 to Origin			X	X	X	X			
Horse Creek	Mile 0.0 to Origin			X	X	X	X			X
Squibb Branch	Mile 0.0 to Origin			X	X	X	X			X
Cassi Creek, East and West Fork	Mile 0.0 to Origin			X	X	X	X			X
Clarks Creek	Mile 0.0 to Origin			X	X	X	X			X
Devil Fork Branch	Mile 0.0 to Origin			X	X	X	X			X
Long Arm Branch	Mile 0.0 to Origin			X	X	X	X			X

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Chigger Branch	Mile 0.0 to Origin			X	X	X	X			X
Broad Shoal Creek	Mile 0.0 to Origin			X	X	X	X			X
California Creek	Mile 0.0 to Origin			X	X	X	X			X
North Indian Creek	Upstream of Erwin	X	X	X	X	X	X			X
Rock Creek	Mile 0.0 to Origin			X	X	X	X			X
Duck Creek	Mile 0.0 to Origin			X	X	X	X			X
Red Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Clear Fork Branch	Mile 0.0 to Origin			X	X	X	X			X
South Indian Creek	Mile 0.0 to Origin			X	X	X	X			X
Mill Creek	Mile 0.0 to Origin			X	X	X	X			X
Granny Lewis Creek	Mile 0.0 to Origin			X	X	X	X			X
Lower Higgins Creek	Mile 0.0 to Origin			X	X	X	X			X
Birchfield Camp Br	Mile 0.0 to Origin			X	X	X	X			X
Big Branch	Mile 0.0 to Origin			X	X	X	X			X
Spivey Creek	Mile 0.0 to Origin			X	X	X	X			X
Coffee Ridge Cr	Mile 0.0 to Origin			X	X	X	X			X
Watts Branch	Mile 0.0 to Origin			X	X	X	X			X
Tumbling Creek	Mile 0.0 to Origin			X	X	X	X			X
Rocky Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Flint Creek	Mile 0.0 to Origin			X	X	X	X			X
Devil Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Sams Creek	Mile 0.0 to Origin			X	X	X	X			X
Upper Higgins Creek	Mile 0.0 to Origin			X	X	X	X			X
E. Fk Higgins Cr	Mile 0.0 to Origin			X	X	X	X			X
Rice Creek	Mile 0.0 to Origin			X	X	X	X			X
Jones Creek	Mile 0.0 to Origin			X	X	X	X			X
Long Branch	Mile 0.0 to Origin			X	X	X	X			X
Pigeon River	Mile 0.0 to 25.9 (Tenn-N. Car. Line)		X	X	X	X	X			
Matthew Creek	Mile 0.0 to Origin			X	X	X	X		X	
Sinking Creek	Mile 0.0 to 5.2		X	X	X	X	X			X
Sinking Creek	Mile 5.2 to Origin	X		X	X	X	X		X	
Cosby Creek	Mile 0.0 to 4.3			X	X	X	X		X	
Cosby Creek	Mile 4.3 to Origin			X	X	X	X			X
N. Fork Bogard Cr	Mile 0.0 to Origin			X	X	X	X		X	
Indian Camp Creek	Mile 0.0 to Origin			X	X	X	X			X
Mill Creek	Mile 0.0 to Origin			X	X	X	X			X
Big Creek	Mile 0.0 to Origin			X	X	X	X			X
Gulf Fork Big Creek	Mile 0.0 to Origin			X	X	X	X			X
Trail Fork Big Creek	Mile 0.0 to Origin			X	X	X	X		X	
Dry Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Bailey Branch	Mile 0.0 to Origin			X	X	X	X		X	

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Bear Branch	Mile 0.0 to Origin			X	X	X	X		X	
Laurel Fork Creek	Mile 0.0 to Origin			X	X	X	X			X
Moss Camp Creek	Mile 0.0 to Origin			X	X	X	X			X
Deep Gap Creek	Mile 0.0 to Origin			X	X	X	X			X
M. Prong Gulf Fork	Mile 0.0 to Origin			X	X	X	X			X
Laurel Creek	Mile 0.0 to Origin			X	X	X	X			X
Brown Gap Creek	Mile 0.0 to Origin			X	X	X	X			X
Tom Creek	Mile 0.0 to Origin			X	X	X	X		X	
Wolf Creek	Mile 0.0 to 2.0			X	X	X	X		X	
Wolf Creek	Mile 2.0 to Origin			X	X	X	X			X
Brush Creek	Mile 0.0 to 1.0			X	X	X	X		X	
Paint Creek	Mile 0.0 to Origin			X	X	X	X			X

All other surface waters named and unnamed in the French Broad River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

X X X X

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105

1200-04-04-.11 Holston River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Holston River	Mile 0.0 to 131.5 (Church Hill Bridge)	X	X	X	X	X	X			
Unnamed Branch	At Holston River (Mile 1.0); Mile 0.0 to Origin			X	X	X	X			
Sand Branch	Mile 0.0 to Origin			X	X	X	X			
Swan Pond Creek	Mile 0.0 to 5.0			X	X	X	X			
Pratt Branch	Mile 0.0 to Origin			X	X	X	X			
Woods Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Holston River (Mile 6.7); Mile 0.0 to Origin			X	X	X	X			
Maccash Branch	At Holston River (Mile 10.8); Mile 0.0 to Origin			X	X	X	X			
Roseberry Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Roseberry Creek (Mile 1.7); Mile 0.0 to 0.5			X	X	X	X			
Unnamed Branch	Mile 0.5 to 0.7			X	X	X	X			
Big Flat Creek	Mile 0.0 to 8.0		X	X	X	X	X			
Little Flat Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed	At L. Flat Creek (Mile 1.3); Mile 0.0 to Origin			X	X	X	X			
Tributary										
Big Flat Creek	Mile 8.0 to Origin			X	X	X	X			
Lyon Creek	Mile 0.0 to 0.3		X	X	X	X	X			
Lyon Creek	Mile 0.3 to 1.9		X	X	X	X	X			
Unnamed Branch	At Lyon Creek (Mile 1.9); Mile 0.0 to Origin			X	X	X	X			
Lyon Creek	Mile 1.9 to Origin			X	X	X	X			
Unnamed Branch	At Lyon Creek (Mile 2.7); Mile 0.0 to Origin			X	X	X	X			
Richland Creek	At Holston River (Mile 27.1); Mile 0.0 to Origin			X	X	X	X			
Beaver Creek	At Holston River (Mile 30.4); Mile 0.0 to Origin			X	X	X	X			
Lost Creek at New Market	Sink at Mile 1.9 to Origin			X	X	X	X			
Buffalo Creek	Below Buffalo Springs			X	X	X	X		X	
Mossy Creek	At Holston River (Mile 52.4); Mile 0.0 to 3.9	X	X	X	X	X	X			
Mossy Creek	Mile 3.9 to Origin		X	X	X	X	X		X	
Unnamed Branch	At Holston River (Mile 55.0); Mile 0.0 to Origin			X	X	X	X			
German Creek	At Holston River (Mile 70.2); Mile 0.0 to 8.1	X	X	X	X	X	X			
German Creek	Mile 8.1 to Origin			X	X	X	X			
Turkey Creek	At Holston River (Mile 75.2); Mile 0.0 to 1.2	X	X	X	X	X	X			
Turkey Creek	Mile 1.2 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Spring Creek	At Holston River (Mile 76.0); Mile 0.0 to 1.2	X	X	X	X	X	X			
Spring Creek	Mile 1.2 to Origin			X	X	X	X			
Thompson Creek	Mile 0.0 to Origin			X	X	X	X			
Fall Creek	At Holston River (Mile 80.7); Mile 0.0 to 1.0	X	X	X	X	X	X			
Fall Creek	Mile 1.0 to Origin			X	X	X	X			
Poor Valley Creek	At Holston River (Mile 89.2); Mile 0.0 to 6.8	X	X	X	X	X	X			
Mooreburg Branch	Mile 0.0 to 1.6	X	X	X	X	X	X			
Mooreburg Branch	Mile 1.6 to Origin			X	X	X	X			
Poor Valley Creek	Mile 6.8 to Origin			X	X	X	X			
Beech Creek	At Holston River (Mile 108.8); Mile 0.0 to Origin			X	X	X	X			
Big Creek (Stanley Prong)	Holston River (Mile 109.1); Mile 0.0 to Origin	X	X	X	X	X	X		X	
Forgey Creek	At Holston River (Mile 116.9); Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Forgey Creek (Mile 1.1); Mile 0.0 to 1.0			X	X		X			
Stoney Point Creek	At Holston River (Mile 123.0); Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Stoney Point Creek (Mile 0.2); Mile 0.0 to Origin			X	X	X	X			
Bradley Creek	At Holston River (Mile 128.8); Mile 0.0 to Origin	X		X	X	X	X			
Holston River	Mile 131.5 to Origin (Mile 142.2)			X	X	X	X			
Alexander Creek	At Holston River (Mile 131.9); Mile 0.0 to 3.4	X	X	X	X	X	X		X	
Unnamed Branch	At Alexander Creek (Mile 3.4); Mile 0.0 to 0.3			X	X	X	X			
Alexander Creek	Mile 3.4 to Origin			X	X	X	X		X	
Smith Creek	At Holston River (Mile 135.5); Mile 0.0 to Origin			X	X	X	X			
Arnott Branch	At Holston River (Mile 137.9); Mile 0.0 to Origin			X	X	X	X			
North Fork Holston River	Mile 0.0 to 5.2 (Tenn-Virginia Line)			X	X		X			
South Fork Holston River	Mile 0.0 to 2.3		X	X	X					
Reedy Creek	Mile 0.0 to 7.1		X	X	X	X	X			
Reedy Creek	Mile 7.1 to Tenn-Virginia Line	X	X	X	X	X	X			
South Fork Holston River	Mile 2.3 to 5.7		X	X	X					
Horse Creek	Mile 0.0 to 1.3		X	X	X	X	X			
Horse Creek	Mile 1.3 to Origin			X	X	X	X			
Little Horse Creek	At Horse Creek (Mile 3.6); Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Dolan Branch	At Little Horse Creek (Mile 2.8); Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At S.F. Holston River (Mile 4.0); Mile 0.0 to Origin		X	X	X	X	X			
South Fork Holston River	Mile 5.7 to 19.6	X	X	X	X	X	X		X	
Kendrick Creek	Mile 0.0 to 1.0			X	X	X	X		X	
Kendrick Creek	Mile 1.0 to Origin			X	X	X	X			
Fall Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At S. F. Holston River (Mile 13.6); Mile 0.0 to Origin			X	X	X	X			
Sinking Creek	At S. F. Holston River (Mile 14.1); Mile 0.0 to Origin			X	X	X	X			
Ford Creek	Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Ford Creek (Mile 1.3); Mile 0.0 to Origin		X	X	X	X	X			
Cedar Creek	At S. F. Holston (Mile 18.0); Mile 0.0 to 2.3			X	X	X	X			
Unnamed Branch	At Cedar Creek (Mile 2.3); Mile 0.0 to Origin			X	X	X	X			
Cedar Creek	Mile 2.3 to Origin			X	X	X	X			
Watauga River	At S. F. Holston (Mile 19.6); Mile 0.0 to 15.0	X	X	X	X	X	X			
Boone's Creek	Mile 0.0 to Origin			X	X	X	X			
Knob Creek	Mile 0.0 to Origin			X	X	X	X			
Watauga River	Mile 15.0 to 16.4		X	X	X	X	X			
Brush Creek	Mile 0.0 to Origin			X	X	X	X			
Lick Creek	Mile 0.0 to Origin			X	X	X	X			
Watauga River	Mile 16.4 to 18.0	X	X	X	X	X	X		X	
Watauga River	Mile 18.0 to 25.8		X	X	X	X	X		X	
Buffalo Creek	At Watauga River (Mile 22.1); Mile 0.0 to Origin			X	X	X	X			
Toll Branch	Mile 0.0 to 0.1			X	X	X	X			
Toll Branch	Mile 0.1 to Origin			X	X	X	X			
Unnamed Branch	Mile 0.2 to Origin			X	X	X	X			
Dry Creek	At Buffalo Creek (Mile 3.3); Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Buffalo Creek (Mile 3.0); Mile 0.0 to 0.2			X	X	X	X			
Campbell Creek	At Watauga River (Mile 25.7); Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Campbell Creek (Mile 1.6); Mile 0.0 to Origin			X	X	X	X			
Campbell Branch	Mile 1.6 to Origin			X	X	X	X			
Watauga River	Mile 25.8 to 55.1 (N.C.-Tenn. Line)	X	X	X	X	X	X			X
Stony Creek	Mile 0.0 to Origin			X	X	X	X			X

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Little Stony Creek	Mile 0.0 to Origin			X	X	X	X			X
Pierce Branch	Mile 0.0 to Origin			X	X	X	X		X	
Bartree Branch	Mile 0.0 to Origin			X	X	X	X		X	
Mill Creek	Mile 0.0 to Origin			X	X	X	X			X
North Fork Stony Creek	Mile 0.0 to Origin			X	X	X	X			X
Upper Hinkle Branch	Mile 0.0 to Origin			X	X	X	X		X	
Doe River	Mile 0.0 to 21.0	X	X	X	X	X	X		X	
Simerly Creek	Mile 0.0 to Origin			X	X	X	X			X
Clarke Creek	Mile 0.0 to Origin			X	X	X	X			X
Tiger Creek	Mile 0.0 to Origin			X	X	X	X			X
Roaring Creek	Mile 0.0 to Origin			X	X	X	X			X
Georges Creek	Mile 0.0 to Origin			X	X	X	X			X
Sugar Hollow Creek	Mile 0.0 to Origin			X	X	X	X		X	
Hampton Creek	Mile 0.0 to Origin			X	X	X	X		X	
L. Prong Hampton Creek	Mile 0.0 to Origin			X	X	X	X			X
Shell Creek	Mile 0.0 to Origin			X	X	X	X			X
Cove Creek	Mile 0.0 to Origin			X	X	X	X			X
Laurel Fork Creek	At Doe River (Mile 7.0); Mile 0.0 to Origin			X	X	X	X			X
Little Laurel Fork	Mile 0.0 to Origin			X	X	X	X			X
Wagner Branch	Mile 0.0 to Origin			X	X	X	X			X
Buck Creek	At Doe River (Mile 20.9); Mile 0.0 to Origin			X	X	X	X			X
Doe River	Mile 21.0 to Origin	X	X	X	X	X	X			X
Little Stony Creek	Mile 0.0 to Origin			X	X	X	X			X
Elk River	At Watauga (Mile 46.8); Mile 0.0 to 14.5 (Stateline)			X	X	X	X		X	
Black Branch	Mile 0.0 to Origin			X	X	X	X			X
Row Branch	Mile 0.0 to Origin			X	X	X	X			X
Heaton Branch	Mile 0.0 to Origin			X	X	X	X			X
Little Laurel Branch	Mile 0.0 to Origin			X	X	X	X			X
Cobb Branch	Mile 0.0 to Origin			X	X	X	X		X	
Cress Branch	Mile 0.0 to Origin			X	X	X	X			X
Roan Creek	At Watauga River (Mile 45.5); Mile 0.0 to 16.7	X	X	X	X	X	X			X
Doe Creek	At Roan Creek (Mile 10.9); Mile 0.0 to Origin			X	X	X	X			X
Spruce Branch	At Doe Creek (Mile 10.9); Mile 0.0 to Origin			X	X	X	X			
Timothy Branch	Mile 0.0 to Origin			X	X	X	X		X	
Campbell's Creek	Mile 0.0 to Origin			X	X	X	X			X
Roan Creek	Mile 16.7 to 17.7			X	X	X	X		X	
Mill Creek	Mile 0.0 to Origin			X	X	X	X			X

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Stout Branch	Mile 0.0 to Origin			X	X	X	X			X
Vaught Creek	Mile 0.0 to Origin	X		X	X	X	X			X
Town Creek	At Roan Creek (Mile 17.7); Mile 0.0 to 0.2			X	X	X	X			
Town Creek	Mile 0.2 to Origin			X	X	X	X			
Furnace Creek	At Town Creek (Mile 3.0); Mile 0.0 to Origin			X	X	X	X			X
Goose Creek	At Town Creek (Mile 3.0); Mile 0.0 to Origin			X	X	X	X			
Patrick Creek	At Goose Creek (Mile 2.6); Mile 0.0 to Origin			X	X	X	X			
Roan Creek	Mile 17.7 to Origin	X		X	X	X	X			X
Corn Creek	Mile 0.0 to Origin			X	X	X	X			X
Forge Creek	Mile 0.0 to Origin			X	X	X	X			X
Brush Fork Creek	Mile 0.0 to Origin			X	X	X	X		X	
Big Dry Run Creek	Mile 0.0 to Origin			X	X	X	X			X
Buffalo Creek	Mile 0.0 to Origin			X	X	X	X		X	
Gap Creek	Mile 0.0 to Origin			X	X	X	X		X	
South Fork Holston River	Mile 19.6 to 35.5 (above Bluff City)	X	X	X	X	X	X			
Muddy Creek	At S. F. Holston (Mile 25.5); Mile 0.0 to 2.6			X	X	X	X			
Booher Creek	At Muddy Creek (Mile 2.6); Mile 0.0 to Origin			X	X	X	X			
Muddy Creek	Mile 2.6 to Origin			X	X	X	X			
Unnamed Branch	At Muddy Creek (Mile 4.9); Mile 0.0 to Origin			X	X	X	X			
Beaver Creek	At S. F. Holston (Mile 29.6); Mile 0.0 to 9.1		X	X	X	X	X			
Back (Beck) Creek	At Beaver Creek (Mile 6.1); Mile 0.0 to Origin			X	X	X	X			
Univac Branch	At Back Creek (Mile 0.5); Mile 0.0 to Origin			X	X	X	X			
Unnamed Branch	At Beaver Creek (Mile 7.3); Mile 0.0 to Origin			X	X	X	X			
Cedar Creek	At Beaver Creek (Mile 7.9); Mile 0.0 to Origin			X	X	X	X			
Beeler Road Branch	At Cedar Creek (Mile 3.2); Mile 0.0 to Origin			X	X	X	X			
Raytheon Branch	At Beeler Road Branch (Mile 1.2); Mile 0.0 to 0.2			X	X		X			
Beaver Creek	Mile 9.1 to 15.3 (Tenn-Virginia Line)		X	X	X	X	X			
Steele Creek	At Beaver Creek (Mile 11.0); Mile 0.0 to Origin			X	X	X	X			
Indian Creek	At S. F. Holston (Mile 35.0); Mile 0.0 to Origin			X	X	X	X			
Booher Creek	At Indian Creek (Mile 3.7); Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Unnamed Branch	At Booher Creek (Mile 0.6); Mile 0.0 to Origin			X	X	X	X			
South Fork Holston River	Mile 35.5 to South Holston Dam	X	X	X	X	X	X		X	
Unnamed Branch	At S. F. Holston (Mile 39.1); Mile 0.0 to Origin			X	X	X	X			
South Fork Holston River	South Holston Dam to mile 62.8 (Virginia Line)	X	X	X	X	X	X			
Big Creek	Mile 0.0 to Origin			X	X	X	X			X
Kendrick Creek	Mile 0.0 to Origin			X	X	X	X		X	
Fishdam Creek	Mile 0.0 to Origin			X	X	X	X			X
Sulphur Springs Branch	Mile 0.0 to Origin			X	X	X	X			X
Sharps Creek	Mile 0.0 to Origin			X	X	X	X		X	
Little Jacobs Creek	Mile 0.0 to Origin	X		X	X	X	X			X
Jacobs Creek	At S. F. Holston (Mile 59.8); Mile 0.0 to 3.4	X	X	X	X	X	X			X
Jacobs Creek	Mile 3.4 to 3.6		X	X	X	X	X			X
Jacobs Creek	Mile 3.6 to Origin			X	X	X	X			X
Harpers Creek	Mile 0.0 to Origin			X	X	X	X			X
Rockhouse Run Creek	Mile 0.0 to Origin			X	X	X	X			X
Laurel Creek	Stateline to Origin			X	X	X	X			X
Beaverdam Creek	Stateline to Origin			X	X	X	X			X
London Bridge Br	Stateline to Origin			X	X	X	X		X	
Reservoir Branch	Mile 0.0 to Origin			X	X	X	X		X	
Stillhouse Branch	Mile 0.0 to Origin			X	X	X	X			X
Chalk Branch	Mile 0.0 to Origin			X	X	X	X			X
Chestnut Branch	Mile 0.0 to Origin			X	X	X	X			X
Haunted Hollow	Mile 0.0 to Origin			X	X	X	X			X
Br.										
Fagall Branch	Mile 0.0 to Origin			X	X	X	X			X
Birch Branch	Mile 0.0 to Origin			X	X	X	X			X
Parks Branch	Mile 0.0 to Origin			X	X	X	X			X
David Blevin	Mile 0.0 to Origin			X	X	X	X		X	
Branch										
Johnson Branch	Mile 0.0 to Origin			X	X	X	X			X
Jim Wright Branch	Mile 0.0 to Origin			X	X	X	X			X
Ledford Branch	Mile 0.0 to Origin			X	X	X	X		X	
W. Fk Beaverdam	Mile 0.0 to Origin			X	X	X	X			X
M. Fk Beaverdam	Mile 0.0 to Origin			X	X	X	X			X
E. Fk Beaverdam	Mile 0.0 to Origin			X	X	X	X			X
Lyons Branch	Mile 0.0 to Origin			X	X	X	X			X
Gentry Creek	Mile 0.0 to Origin			X	X	X	X			X
Dry Branch	Mile 0.0 to Origin			X	X	X	X			X
Grindstone Branch	Mile 0.0 to Origin			X	X	X	X			X

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Flatwood Branch	Mile 0.0 to Origin			X	X	X	X			X
Corum Branch	Mile 0.0 to Origin			X	X	X	X			X
West Fork Laurel Creek	Mile 0.0 to Origin			X	X	X	X			X

All other surface tributaries named and unnamed in the Holston River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

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Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.12 Lower Cumberland River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Cumberland River	Mile 74.6 (Ky-Tenn Line) to 118.3 (Cummings Cr.)	X	X	X	X	X	X	X		
Saline Creek	Mile 0.0 to Hwy 120		X	X	X	X	X			
Saline Creek	Hwy 120 to Fort Campbell boundary		X	X	X	X	X		X	
Saline Creek	Fort Campbell Boundary to Origin		X	X	X	X	X			
Bear Creek	Mile 0.0 to Origin			X	X	X	X			
Long Creek	Highway 49 to Origin			X	X	X	X		X	
Elk Creek	Mile 0.0 to Origin			X	X	X	X			
Wells Creek	Mile 0.0 to Origin			X	X	X	X			
Yellow Creek	Mile 3.4 to Ruskin Cave			X	X	X	X		X	
Cumberland River	Mile 118.3 to 125.3 (Red River)	X	X	X	X	X	X	X		
Cumberland River	Mile 125.3 to 175.7 (Richland Creek)	X	X	X	X	X	X	X		
Red River	Mile 0.0 to 2.0		X	X	X	X	X	X		
Red River	Mile 2.0 to 15.0	X	X	X	X	X	X	X		
Red River	Mile 15.0 to 51.2 (Ky-Tenn Line)	X	X	X	X	X	X			
South Fork Red River	Mile 20.4 (Ky-Tenn Line) to Origin			X	X	X	X			
Big West Fork	Mile 0.0 to 14.6 (Ky-Tenn Line)		X	X	X		X	X		
Little West Fork	Mile 0.0 to 10.4		X	X	X	X	X			
Sulphur Fork	Mile 0.0 to 26.6	X	X	X	X	X	X			
Sulphur Fork	Mile 26.6 to 28.6		X	X	X	X	X			
Sulphur Fork	Mile 28.6 to Origin	X	X	X	X	X	X			
Carr Creek	Mile 0.0 to Origin			X	X	X	X			
Red River	Mile 81.0 (Ky-Tenn Line) to Origin	X	X	X	X	X	X			
Summers Branch	Mile 0.0 to Origin			X	X	X	X			
Hurricane Creek	Mile 0.0 to Origin			X	X	X	X			
Sulphur Springs Cr	Mile 0.0 to Origin			X	X	X	X			
Harpeth River	Mile 0.0 to 10.3	X	X	X	X	X	X			
Jones Creek	Mile 0.0 to Origin		X	X	X	X	X			
Town Branch	Mile 0.0 to Origin		X	X	X	X	X			
Harpeth River	Mile 10.3 to 52.8	X	X	X	X	X	X			
Trace Creek	Mile 0.0 to Origin		X	X	X	X	X			
Turnbull Creek	Mile 0.0 to Origin	X	X	X	X	X	X			
Sullivans Branch	Mile 0.0 to Origin		X	X	X	X	X			
Beaver Dam Creek	Mile to 0.0 to Origin		X	X	X	X	X			
Gin Branch	Mile 0.0 to Origin		X	X	X	X	X			
Brush Creek	Mile 0.0 to Origin		X	X	X	X	X			
Caney Fork Creek	Mile 0.0 to Origin		X	X	X	X	X			
Harpeth River	Mile 52.8 to 55.8		X	X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Harpeth River	Mile 55.8 to 57.8		X	X	X	X	X			
Harpeth River	Mile 57.8 to 61.9 (Little Harpeth)	X	X	X	X	X	X			
Little Harpeth River	Mile 0.0 to Origin		X	X	X	X	X			
Harpeth River	Mile 61.9 to 68.3 (Cartwright Creek)		X	X	X	X	X			
Cartwright Creek	Mile 0.0 to Origin			X	X	X	X			
Harpeth River	Mile 68.3 to 79.0	X	X	X	X	X	X			
West Harpeth River	Mile 0.0 to Origin	X	X	X	X	X	X			
Harpeth River	Mile 79.0 to 85.2		X	X	X	X	X			
Spencer Creek	Mile 0.0 to Origin			X	X	X	X			
Harpeth River	Mile 85.2 to Origin	X	X	X	X	X	X			
Sycamore Creek	Mile 0.0 to 10.0	X	X	X	X	X	X			
Sycamore Creek	Mile 10.0 to Origin	X		X	X	X	X			
Marrowbone Creek	Mile 0.0 to 3.0	X	X	X	X	X	X			
Marrowbone Creek	Mile 3.0 to Origin	X		X	X	X	X			
Cumberland River	Mile 175.7 to 189.5	X	X	X	X	X	X	X		
Richland Creek	Mile 0.0 to Origin			X	X	X	X			
Whites Creek	Mile 0.0 to Origin		X	X	X	X	X			
Ewing Creek	Mile 0.0 to Origin		X	X	X	X	X			
Cumberland River	Mile 189.5 to 216.2 (Old Hickory Dam)	X	X	X	X	X	X	X		
Mill Creek	Mile 0.0 to 11.5		X	X	X	X	X			
Mill Creek	Mile 11.5 to 23.0			X	X	X	X			
Mill Creek	Mile 23.0 to Origin			X	X	X	X			
Stones River	Mile 0.0 to 6.8	X	X	X	X	X	X			
Stoners Creek	Mile 0.0 to Origin			X	X	X	X			
McCrary Creek	Mile 0.0 to Origin			X	X	X	X			
Stones River (Percy Priest Res.)	Mile 6.8 to 38.7 (Confluence-East & West Fork)	X	X	X	X	X	X			
Suggs Creek	Mile 0.0 to Origin			X	X	X	X			
Smith Springs Creek	Mile 0.0 to Origin			X	X	X	X			
Hurricane Creek	Mile 0.0 to Origin			X	X	X	X			
Stewart Creek	Mile 0.0 to Origin			X	X	X	X			
Harts Branch	Mile 0.0 to Origin			X	X	X	X			
Fall Creek & Tributaries	Mile 0.0 to Origin			X	X	X	X			
East Fork Stones River	Mile 0.0 to 44.5 (Near Woodbury)	X	X	X	X	X	X			
Bradley Creek	Mile 0.0 to Origin			X	X	X	X			
Cripple Creek	Mile 0.0 to Origin			X	X	X	X			
East Fork Stones River	Mile 44.5 to 45.2		X	X	X	X	X			
East Fork Stones River	Mile 45.2 to Origin	X	X	X	X	X	X			
West Fork Stones River	Mile 0.0 to 10.0	X	X	X	X	X	X			
Overall Creek	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
West Fork Stones River	Mile 10.0 to 15.2		X	X	X	X	X			
West Fork Stones River	Mile 15.2 to Origin	X	X	X	X	X	X			
Lytle Creek	Mile 0.0 to Origin			X	X	X	X			
Middle Fork Stones	Mile 0.0 to Origin	X	X	X	X	X	X			
Christmas Creek	Mile 0.0 to Origin			X	X	X	X			
Cumberland River	Mile 216.2 to 309.2 (Caney Fork River)	X	X	X	X	X	X	X		
Drakes Creek	Mile 0.0 to 4.9	X	X	X	X	X	X	X		
Drakes Creek	Mile 4.9 to Origin			X	X	X	X			
Smiths Creek	Mile 0.0 to Origin			X	X	X	X			
Cedar Creek	Mile 0.0 to 2.0	X	X	X	X	X	X	X		
Cedar Creek	Mile 2.0 to Origin			X	X	X	X			
Spencer Creek	Mile 0.0 to 2.8	X	X	X	X	X	X	X		
Spencer Creek	Mile 2.8 to Origin			X	X	X	X			
Bartons Creek	Mile 0.0 to Origin			X	X	X	X			
Sinking Creek	Mile 0.0 to Origin			X	X	X	X			
Big Goose Creek	Mile 0.0 to Origin			X	X	X	X			
Little Goose Creek	Mile 0.0 to Origin			X	X	X	X			
Round Lick Creek	Mile 0.0 to Origin			X	X	X	X			

All other surface waters named and unnamed in the Lower Cumberland River Basin (and Green River Basin), with the exception of wet weather conveyances, which have not been specifically noted shall be classified.

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Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.13 Upper Cumberland River Basin.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Cumberland River	Mile 309.2 to 385.5 (Ky-Tenn Line)	X	X	X	X	X	X	X		
Caney Fork River	Mile 0.0 to 25.4	X	X	X	X	X	X	X	X	
Mulherrin Creek	Mile 0.0 to Origin			X	X	X	X			
Hickman Creek	Mile 0.0 to Origin			X	X	X	X			
Smith Fork Creek	Mile 0.0 to Mile 3.0			X	X	X	X		X	
Smith Fork Creek	Mile 3.0 to Origin			X	X	X	X			
Dry Creek	Mile 0.0 to Origin			X	X	X	X		X	
Jones Fork	Mile 0.0 to Origin			X	X	X	X		X	
Caney Fork River	Mile 25.4 to Origin	X	X	X	X	X	X			
Mine Lick Creek	Mile 0.0 to 5.0	X		X	X	X	X			
Mine Lick Creek	Mile 5.0 to Origin			X	X	X	X			
Falling Water River	Mile 0.0 to 39.0	X		X	X	X	X			
Falling Water River	Mile 39.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Pigeon Roost Creek	Mile 0.0 to Origin			X	X	X	X			
Fall Creek	Mile 0.0 to Origin			X	X	X	X			
Pine Creek	Mile 2.4 to Origin			X	X	X	X			X
Turner Branch	Mile 0.0 to 0.5			X	X	X	X			X
Sink Creek	Mile 4.6 to Origin			X	X	X	X			X
Collins River	Mile 0.0 to 43.0	X	X	X	X	X	X			
Mountain Creek	Mile 0.0 to 6.0			X	X	X	X			X
Charles Creek	Mile 0.0 to 9.0			X	X	X	X			X
Barren Fork River	Mile 0.0 to 4.5			X	X	X	X			
Barren Fork River	Mile 4.5 to Origin	X	X	X	X	X	X			X
Hickory Creek	Mile 19.0 to 24.0			X	X	X	X			X
W.F. Hickory C	Mile 0.0 to Origin			X	X	X	X			
Keel Branch	Mile 0.0 to Origin			X	X	X	X			
Hills Creek	Mile 0.0 to Origin			X	X	X	X			X
Collins River	Mile 43.0 to 49.0	X		X	X	X	X			X
Big Creek	Mile 0.0 to 6.0	X		X	X	X	X			
Big Creek	Mile 6.0 to Origin			X	X	X	X			
Collins River	Mile 49.0 to Origin			X	X	X	X			
Caney Fork River	Mile 92.2 to Origin	X	X	X	X	X	X			
Rocky River	Mile 0.0 to 9.0	X	X	X	X	X	X			
Rocky River	Mile 9.0 to 13.0	X	X	X	X	X	X		X	
Rocky River	Mile 13.0 to Origin	X	X	X	X	X	X			
Calfkiller River	Mile 0.0 to 14.1	X	X	X	X	X	X			
Calfkiller River	Mile 14.1 to 30.8	X	X	X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Calfkiller River	Mile 30.8 to Origin	X	X	X	X	X	X		X	
Cane Creek	Mile 1.0 to 8.0	X	X	X	X	X	X		X	
Falls Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 8.0 to Origin	X	X	X	X	X	X			
Bee Creek	Mile 0.0 to 7.3			X	X	X	X			
Bee Creek	Mile 7.3 to Origin	X		X	X	X	X			
Wilkerson Creek	Mile 0.0 to Origin			X	X	X	X			
Frey Branch	Mile 0.0 to Origin			X	X	X	X			
Roaring River	Mile 0.0 to 29.9			X	X	X	X			
Roaring River	Mile 29.9 to Origin	X		X	X	X	X			
Spring Creek	Mile 0.0 to Origin			X	X	X	X			
Bear Creek	Mile 0.0 to Origin			X	X	X	X			
Carr Creek	Mile 0.0 to 4.2			X	X	X	X			
Carr Creek	Mile 4.2 to Origin	X		X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Goose Creek	Mile 0.0 to 12.0			X	X	X	X			X
Flynns Creek	Mile 0.0 to 5.0			X	X	X	X			X
Obey River	Mile 0.0 to 7.3	X	X	X	X	X	X			X
Neely Creek	Mile 0.0 to Origin (3.3 miles)			X	X	X	X			X
Wolf River	Mile 0.0 to Ky State Line		X	X	X	X	X			
Wolf River	Ky State Line to Origin			X	X	X	X			X
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Obey River	Mile 7.3 to confluence of East and West Forks	X	X	X	X	X	X			
West Fork Obey River	Mile 0.0 to Origin			X	X	X	X			
East Fork Obey River	Mile 0.0 to Origin	X		X	X	X	X			
Buffalo Cove Creek	Mile 0.0 to Origin			X	X	X	X			
Rock Castle Creek	Mile 0.0 to Origin			X	X	X	X			
Big South Fork Cumberland River	Mile 55.5 (Ky-Tenn Line) to Origin (Mile 77.0)	X	X	X	X	X	X			
No Business Creek	Upper 4.0 miles			X	X	X	X			X
Parch Corn Creek	Upper 1.5 miles			X	X	X	X			X
Station Camp Creek	Upper 4.8 miles			X	X	X	X			X
Laurel Fork Creek	Upper 4.9 miles			X	X	X	X			X
North White Oak Creek	Upper 3.9 miles			X	X	X	X			X
Williams Creek	Upper 7.6 miles			X	X	X	X			X
Pine Creek	Mile 0.0 to 10.5			X	X	X	X			
Pine Creek	Mile 10.5 to Origin	X		X	X	X	X			
New River	Mile 0.0 to 15.0			X	X	X	X			
New River	Mile 15.0 to Origin	X		X	X	X	X			
Clear Fork River	Mile 0.0 to Origin			X	X	X	X			

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Elk Fork Creek	Mile 1.8 (KY Line) to Origin	X		X	X	X	X			

All other surface waters named and unnamed, within the Upper Cumberland River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

				X	X	X	X			
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Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

1200-04-04-.14 Barren River Watershed.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
West Fork Drakes Creek	Mile 33.0 (stateline) to Origin			X	X	X	X			
Caney Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Dry Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Middle Fork Drakes Creek	Mile 22.2 (stateline) to Origin	X		X	X	X	X			
Sulphur Fork Creek	Mile 9.0 (stateline) to Origin			X	X	X	X			
Dutch Creek	Mile 0.0 to Origin			X	X	X	X			
Trammel Creek	Mile 30.7 (stateline) to Origin			X	X	X	X			
Little Trammel Creek	Mile 4.7 (stateline) to Origin			X	X	X	X			
Long Creek	Mile 14.6 (stateline) to Origin			X	X	X	X			
West Fork Long Creek	Mile 0.0 to Origin			X	X	X	X			
Puncheon Creek	Mile 4.3 (stateline) to Origin			X	X	X	X			
Unnamed Tributary (Adams Spring)	Mile 0.0 to Origin	X		X	X	X	X			
Little Puncheon Creek	Mile 0.0 to Origin			X	X	X	X			
Spring Creek	Mile 0.0 to Origin	X		X	X	X	X			
Salt Lick Creek	Mile 4.7 (stateline) to mile 6.8			X	X	X	X			
Salt Lick Creek	Mile 6.8 to mile 9.9			X	X	X	X		X	
Salt Lick Creek	Mile 9.9 to Origin			X	X	X	X			
Long Fork	Mile 4.5 (stateline) Origin			X	X	X	X			
White Oak Creek	Mile 4.1 (stateline) to Origin			X	X	X	X			
Long Hungry Creek	Mile 0.0 to Origin			X	X	X	X			
Line Creek	Mile 14.2 (stateline) to Origin			X	X	X	X			
Trace Creek	Mile 0.0 to Origin			X	X	X	X			
Little Trace Creek	Mile 0.0 to Origin			X	X	X	X			

All other surface waters named and unnamed, within the Barren River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified

X X X X

Authority: T.C.A. §§4-5-201, et seq. and 69-3-105.

I certify that the information included in this filing is an accurate and complete representation of the intent and scope of rulemaking proposed by the agency.

Date: 10/20/09

Signature: Paul E. Davis

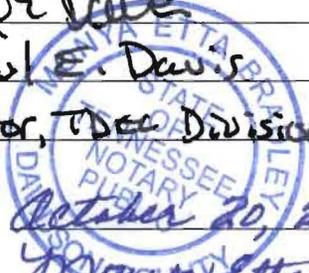
Name of Officer: Paul E. Davis

Title of Officer: Director, TDEC Division of Water Pollution Control

Subscribed and sworn to before me on: October 20, 2009

Notary Public Signature: Theresa Bradley

My commission expires on: March 10, 2012



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Filed with the Department of State on: 10/21/09

Tre Hargett

Tre Hargett
Secretary of State

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