

RESOLUTION NO. _____

SPONSORED BY:

A RESOLUTION ESTABLISHING A WATER QUALITY BUFFER AND RELATED REGULATION OF STREAMS, RIVERS, WETLANDS, PONDS AND LAKES IN THE URBANIZED AREA OF BLOUNT COUNTY.

WHEREAS; the streams and rivers of Blount County supply much of the water required by citizens for drinking and other municipal and industrial uses, and

WHEREAS; the people of Blount County use surface waters for fishing, canoeing, Swimming, and other recreational and economic purposes, and

WHEREAS; the streams and rivers of Blount County are vital to the environmental health of the community and to wildlife and aquatic life that reside in or near said streams; and

WHEREAS; the Blount County Commission finds that the protection of streams and rivers in Blount County is vital to the health, safety, environmental, and economic welfare of its citizens and the community at-large, and

WHEREAS; it is the intent of this Resolution to establish a new WATER QUALITY BUFFER of restricted development and limited land use adjacent to all community waters in the unincorporated areas of Blount County, and

WHEREAS; new development and re-development adjacent to community waters shall include such buffers in their proposed plans, and

WHEREAS; Under the authority of the Federal Water Pollution Control Act of 1977 (known as the Clean Water Act), the United States Environmental Protection Agency (EPA) is specifically required to develop and oversee the National Pollutant Discharge Elimination System (NPDES) permit program which requires all communities operating a small municipal separate storm sewer system (MS4) to regulate the discharge of pollutants to the waters of the state. Under the authority of the Tennessee Water Quality Control Act of 1977 the Tennessee Department of Environment and Conservation (TDEC) has interpreted that this mandate includes the regulation of water quality buffers. The permit requires that Blount County "develop and implement a set of requirements to establish, protect and maintain water quality buffers to provide additional water quality treatment in riparian areas of new development and redevelopment." In the permit, water quality buffers are defined as "a permanent strip of natural perennial vegetation adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees."

NOW, THEREFORE BE IT ORDAINED BY THE COMMISSION OF BLOUNT COUNTY, TENNESSEE, AS FOLLOWS:

WATER QUALITY BUFFERS

Section	
1	Definitions
2	Authority
3	Applicability
4	Standards for Water Quality Buffers
5	Water Quality Buffer Enhancement
6	Prohibited Activities within the Water Quality Buffer
7	Protection of Water Quality Buffers During Construction
8	Protection and Maintenance of Water Quality Buffers After Construction
9	Covenants, Site Plans, and Plats Prepared for Recoding
10	Variances
11	Right of Entry
12	Non-compliance
13	Civil Penalties
14	Performance Bonds
15	Repeal Clause
16	Conflict with State Requirements
17	Effective Date

Section 1 DEFINITIONS

As used in this Document, unless the context clearly indicates otherwise, the following definitions apply:

- a. "Average Buffer Width" means the minimum required average distance of a water quality buffer measured at a 90 degree angle from the top of bank (for streams, rivers, and wetlands) or edge of water at the normal pool elevation (for rivers and lakes) to the buffer's landward boundary, including both the inner and outer zones, as determined along the length of the entire buffer.
- b. "Blount County" represents any permitting agency within the county government including but not limited to the following: Stormwater, Building Codes, Planning, Environmental Health, and Zoning.
- c. "Development" includes any of the following activities:
 - 1. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:
 - a. One or more residential or nonresidential buildings, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or,
 - b. The division or allocation of land or space, between or among two or more existing or prospective occupants by means of, or for the purposes of streets, common areas, leaseholds, condominiums, building groups or other features.
 - 2. The process of grading, clearing, filling, quarrying, construction, or reconstruction to improved or unimproved real estate or other similar activities.
- d. "Existing Land Use" means a land use which, prior to the effective date of this resolution, is either:
 - 1. Completed; or
 - 2. Ongoing, as in the case of agricultural activity; or
 - 3. Under construction; or
 - 4. Fully approved by the governing authority.
- e. "Impervious Surfaces" shall mean those areas that prevent or impede the infiltration of stormwater into the soil as it entered in natural conditions prior to development. Common impervious areas include, but are not limited to, rooftops, sidewalks, walkways, streets, patio areas, driveways, parking lots, storage areas, compacted gravel and soil surfaces, awnings and other fabric or plastic coverings.
- f. "Inner Zone". See minimum width.
- g. "Land-disturbing Activity" shall mean any activity on private or public land that may result in soil erosion and the movement of sediments. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, clearing, grading, filling, logging and/or tree chipping operations, haul roads associated with the development, and excavation, etc.

- h. "Minimum Width" means the smallest allowed width of a water quality buffer. The minimum width is measured at a 90 degree angle from the top of bank (for streams, rivers, and wetlands) or edge of water at the normal pool elevation (for rivers and lakes) landward. The land in this area is called the "minimum width area" or "inner zone".
- i. "Native Vegetation" are indigenous plants to East Tennessee or the southeastern United States.
- j. "Outer Zone" means the area of land between the landward boundaries of the inner zone to the landward edge of the water quality buffer. The outer zone is measured at a 90 degree angle landward from the minimum width boundary. The land in this area is also called the "remaining buffer area".
- k. "Owner or Property Owner." The legal owner of a property as recorded by the Blount County Register of Deeds.
- l. "Pond or Lake" are defined as inland bodies of standing water.
- j. "Redevelopment" See "development"
- k. "Stormwater Program Director" means the person(s) Stormwater Program Director of Blount County, Tennessee, or a designee under their supervision.
- l. "Stream" or "River" means the following:
 - 1. A linear surface water conveyance that can be characterized as having either perennial or ephemeral base flow and
 - 2. Has a defined floodplain that has been computed as part of a Flood Insurance Rate Map (FIRM) by the Federal Emergency Management Agency (FEMA); or
 - 3. Are identified as a blue line on a 7.5-minute USGS quadrangle, unless otherwise designated by Tennessee Department of Environmental Conservation (TDEC); or
 - 4. Are determined to be streams by Blount County, the United States Army Corps of Engineers (USACE) or TDEC.
- m. "Top of Bank" the uppermost limit of an active stream channel, usually marked by a break in slope.
- n. "Total Buffer Width" means the distance of a water quality buffer measured at a 90 degree angle from the top of bank (for streams, rivers, and wetlands) or edge of water at the normal pool elevation (for rivers and lakes) to the buffer's landward boundary, including both the inner and outer zones, at any location along the buffer.

- o. “Urbanized area”. A land area determined by the most recent United States Census to have a population of at least 50,000 people. The urbanized area is determined by the United States Census Bureau and can be supplied by the Blount County Stormwater Department upon request. Although the United States Census Bureau and United States Environmental Protection Agency (USEPA) no longer uses the term “urbanized area”, the definition established herein is taken from the USEPA’s designation criteria for small municipal separate sewer systems (MS4s) established in 40 CFR Parts 122 and 123 and the State of Tennessee’s Small MS4 General Permit TNS000000, the latter of which is foundational to the requirements of this resolution.
- p. "Water Quality Buffer" is a use-restricted, permanent strip of natural, perennial vegetation adjacent to a stream, river, wetland, pond, or lake. The purposes of a water quality buffer are to maintain existing water quality by minimizing the risk of pollutants in stormwater runoff reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy of adjacent waters..
- q. “Water Quality Management Plan” means an engineering plan required by Blount County, Tennessee for the location and/or design of stormwater control measures and water quality buffers within a proposed development or redevelopment.
- r. "Waterbody" or “waters” means streams, rivers, wetlands, ponds, and lakes.
- s. "Wetlands" shall mean an area that is naturally or by design inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetland determination shall be made by the Army Corps of Engineers and/or Tennessee Department of Environment and Conservation (TDEC), or a qualified professional that has been trained in the identification and delineation of wetland areas.

Section 2 AUTHORITY

- a. The Stormwater Program Director shall administer the provisions of this resolution.
- b. The Stormwater Program Director has the authority to promulgate rules, regulations, policies, enforcement, and guidance consistent with this resolution in order to carry out its meaning and intent.
- c. The standards for water quality buffers stated in the Maryville-Alcoa Stormwater Management Manual are adopted by reference in order to carry out the meaning and intent of this resolution. The policies, criteria, and requirements for water quality buffers stated in the manual shall be enforceable, consistent with the other provisions of this resolution.
- d. In the event that the Stormwater Program Director determines that a violation of any provision of this resolution has occurred, or that work does not comply with an approved plan or permit, the Stormwater Program Director may issue a Notice of Violation to the permittee or property owner and/or any other person or entity having responsibility for the activities performed at a development or existing land use, at which time the penalty provisions of this resolution shall be implemented.

Section 3 APPLICABILITY

This resolution shall apply to the following properties

- a. Developments and redevelopments located in the urbanized area of Blount County that will result in a land disturbing activity that is equal to or greater than one (1) acre including projects less than one (1) acre that are part of a larger common plan of development or sale that will disturb one (1) acre or more, unless exempted from obtaining a grading permit under Section 5 of the Blount County Erosion and Sediment Control Resolution No. 09-03-004;
- b. Any existing land use located in the urbanized area of Blount County that includes one or more water quality buffers on the property's plat.

Section 4 STANDARDS FOR WATER QUALITY BUFFERS

- a. Owners of applicable properties as defined in section 2 of this resolution shall establish, protect, and maintain water quality buffers along all streams, rivers, lakes, ponds, and wetlands, or portions thereof, located in the urbanized area of Blount County. Any property or portion thereof that lies within the water quality buffer is subject to the restrictions of the water quality buffer established in this resolution.
- b. Water quality buffer widths shall be established and maintained based on the status of the stream, river, lake, pond, or wetland, as defined by the Tennessee Department of Environment and Conservation, as follows.
 1. Water quality buffers established along waters with available parameters for siltation or habitat alteration or on unassessed waters shall have a minimum width (inner zone) of 15 feet and a total buffer width of 30 feet.
 2. Water quality buffers established along waters with unavailable parameters for siltation or habitat alteration or Exceptional Tennessee Waters shall have a minimum width (inner zone) of 30 feet and a total buffer width of 60 feet.
- c. Buffer width averaging can be applied in the outer zone to accommodate the development design, provided the minimum average width of the water quality buffer equals or exceeds the total buffer width established in Section 3.b of this resolution. When applied, buffer width averaging shall be in accordance with the policies and guidance included in the Maryville-Alcoa Stormwater Management Manual.
- d. Infrastructure to be located in a water quality buffer, such as roads, bridges, utilities corridors, and storm drainage conveyances, shall be minimized. Their design in a water quality buffer shall be in accordance with the Maryville-Alcoa Stormwater Management Manual.
- e. Paths and greenway trails, public or private, are allowed in a water quality buffer in accordance with the Maryville-Alcoa Stormwater Management Manual.

- f. The water quality buffer shall be protected and maintained in a vegetated state as follows:
1. The predominant vegetation within the inner zone (minimum buffer width area) shall be trees. The predominant vegetation in the outer zone (remaining buffer area) shall be herbaceous plants (i.e., vascular plants that have little to no persistent woody stems above ground, such as grass). Trees are encouraged in the outer zone.
 2. Areas of bare soil and erosion are not allowed at any location in the water quality buffer, including streambanks and shorelines.
 3. Mulch in any form is discouraged in a water quality buffer except when used as a temporary erosion prevention measure. Vegetation, such as grass and similar plant ground covers, is preferred as a permanent soil stabilization method.
 4. Non-vegetated ground covers (impervious surfaces, pavers, etc.) are prohibited, except when shown on an approved water quality management plan or with prior approval by the local government.
 5. The introduction of invasive plant species and plants considered as nuisance, non-native (also termed "exotic") is prohibited in and near the buffer. Such undesirable species include, but are not limited to, bush honeysuckles, privet, English ivy, kudzu, and mimosa (silk) trees. Native plant species are preferred throughout the buffer.
 6. Additional guidance on water quality buffer vegetation is provided in the Maryville-Alcoa Stormwater Management Manual.
- g. Designs for water quality buffers shall not include or support any of the prohibitions established in Section 6 of this resolution.

Section 5 WATER QUALITY BUFFER ENHANCEMENT

- a. If a water body does not have an established water quality buffer as described in Section 3 of this resolution, then a water quality buffer enhancement plan shall be submitted to the Blount County Stormwater Department for approval and comply with the following:
1. The plan shall accurately depict the landward boundaries and widths of the inner and outer zones, existing vegetation to remain, plants to be installed including plant species, and installation location. Roadway crossings, utilities, stormwater conveyances and control measures, and paths/trails shall also be shown and properly labeled, along with the land cover/surface type for each feature. Additional information shall be included as is normally required by Blount County, Tennessee as part of a landscaping plan for a proposed development.
 2. The plan shall be drawn to scale and may be part of a larger landscaping plan.
 3. The plan shall be a part of the required site plan review submittals.

- b. Establishment of a vegetated water quality buffer must adhere to the vegetation standards established in Section 3.f of this resolution and the following conditions, and be shown on the buffer enhancement plan:
 1. Live plants (i.e., seedlings or saplings) shall be installed for trees and shrubs. Sod is preferred over seed for installation of herbaceous species. Plant density shall depend on the plant species to be installed, the re-vegetation technique to be used, and existing site conditions;
 2. Stream banks must be planted with native vegetation that represents both woody (trees/shrubs) and herbaceous species.
 3. Trees shall not be planted in a utility easement;
 4. No single species may comprise more than one third (1/3) of the total planted trees or shrubs;
 5. All vegetation must be guaranteed at a seventy-five percent (75%) survivorship. Vegetation mortality must be accounted for all planting densities that are proposed in buffer enhancement plans;
 6. Non-native plant species must be removed prior to new plant installation; and,
 7. Erosion prevention and sediment control practices shall be provided in keeping with Section 6 of this resolution and Blount County, Tennessee Resolution No. 09-03-004 pertaining to grading, erosion, and sedimentation.
 - 8.

Section 6 PROHIBITED ACTIVITIES WITHIN THE WATER QUALITY BUFFER

The following activities are prohibited within the water quality buffer:

- a. The storage of pesticides, herbicides, and fertilizers, and the use of pesticides, herbicides, and fertilizers not deemed safe for use near water,
- b. All types of impervious surfaces and structures, including buildings, storage facilities, parking lots or spaces, driveways, pools, patios, and other accessories, unless already included in an approved water quality management plan,
- c. Vehicle and equipment parking, storage, and maintenance,
- d. Wastes of any type, including but not limited to household or business trash, landscape waste, confined animal waste, sewage, grease, used oil, and paint,
- e. waste disposal, storage, and transfer areas including but not limited to landfills, dumpsters, and grease bins,
- f. Septic tanks and septic drain fields, except when located in an approved location by the Blount County Environmental Health Department,
- g. , Hazardous or sanitary waste landfills,
- h. Mining (unless exempt by State law),

- i. Animal concentration areas, where animals gather in groups for migration, breeding, feeding, exercise, loafing, relief, or sheltering, including but not limited to animal lots, barns, corrals, holding areas, and kennels, and
- j. Other uses known to contribute pollutants to waterways.

Section 7 PROTECTION OF WATER QUALITY BUFFER DURING CONSTRUCTION

- a. All water quality buffers must be protected during land disturbing activities.
- b. Prior to the initiation of land disturbing activities, construction layout surveys must include: staking and labeling of the water quality buffer perimeter. A combination of stakes, flagging and/or silt fence may be used to ensure adequate visibility of the water quality buffer. The layout must be inspected and approved by the Stormwater Department before grading begins.
- c. All areas of the water quality buffer, including stream banks, must be in a permanently stabilized condition upon completion of land disturbing activities. No actively eroding bare or unstable stream banks shall remain. Placement of riprap and other hard armor is allowed only when bioengineering alternatives are not feasible.
- d. Water quality buffers cannot be encroached upon or disturbed during project construction, unless they are being established, restored, or enhanced in accordance with an approved buffer enhancement plan.

Section 8 PROTECTION AND MAINTENANCE OF WATER QUALITY BUFFERS AFTER CONSTRUCTION

- a. Property owners shall protect and maintain the platted water quality buffers located on their property, in keeping with the standards and prohibited activities established in this resolution. The property owner may restore or enhance vegetation within a water quality buffer as necessary to ensure these standards are achieved.
- b. The Director of the Stormwater Department or his designee shall have the authority to require a property owner to restore or enhance water quality buffers that have been disturbed or do not meet, or have the potential to not meet through natural vegetative succession, the standards that are defined herein.
- c. Enhancement of water quality buffers must be performed in accordance with the requirements of Section 4 and the guidance provided below.

Section 9 COVENANTS, SITE PLANS, AND PLATS PREPARED FOR RECORDING

- a. Once construction has ceased on a project, water quality buffers shall be shown on the as-built plan for the property and included in the Covenants for Maintenance of Stormwater Facilities and Best Management Practices, which shall be recorded with the plat. The covenants shall require that maintenance of the water quality buffer in perpetuity be the responsibility of the property owner.
- b. Unless otherwise provided herein, all site development plans and plats shall:
 1. Show the extent of any WQB on the subject property by metes and bounds or defined distance from metes and bounds referent and be labeled as "Water Quality Buffer".
 2. Provide a note with reference to the WQB stating that there shall be no clearing, grading, construction or disturbance of vegetation except as permitted by Blount County.

Section 10 VARIANCES

The Stormwater Director may waive or modify any of the criteria which are deemed inappropriate or too restrictive for site conditions by granting a variance as set forth herein. The variance may be granted in writing under the following conditions:

- a. At the time of submission of a water quality management plan, an applicant may request variances to become part of the approved plan. The applicant must request the variance in writing, justifying the purpose for the variance, specifying the variance requested, and providing documentation that the issuance of a variance will not result in a reduction in water quality of the adjacent waterbody.
- b. During construction, a permit holder may request variances to the approved water quality management plan. Until such time as the amended plan is approved by Blount County, the land disturbing activity and associated construction shall not proceed, except in accordance with the approved water quality management plan as originally approved.
- c. Absent universal circumstances, a response to the variance request should be provided by Blount County within ten (10) working days. Without a written approval, no variance shall be considered valid.

Section 11 RIGHT OF ENTRY

- a. The Stormwater Program Director or his/her designee may enter upon any property that has applied for, or received, a grading permit or includes a platted water quality buffer during reasonable hours to inspect for compliance with the provisions of this resolution.
- b. Failure of a property owner, person(s) working on behalf of the property owner, or other legal occupant of the property, such as a lessee, to allow such entry by the Stormwater Program Director or his/her designee onto a property for the purposes set forth in this resolution shall be cause for the issuance of enforcement actions in accordance with this resolution

Section 12 NON-COMPLIANCE

Whenever the County Stormwater Director or his designee determines that a violation of any provision of this resolution has occurred, or that work does not have a required plan or permit, or that work does not comply with an approved plan or permit, the County Stormwater Director or his designee shall issue a Notice of Non-Compliance to the property owner, utility, facility operator, lessee, contractor, permittee and/or the equipment operator doing work on the site. The Notice of Non-Compliance shall:

- a. Be in writing.
- b. Include a description of the propely sufficient for identification of where violation has occurred.
- c. List the violation.
- d. State the action required.
- e. Provide a deadline for compliance or to stop work.

Section 13 CIVIL PENALTIES

- a. Civil Penalty:

Any person or entity violating the provisions of this resolution may be assessed a civil penalty by the County of not less than fifty dollars (\$50.00) or more than five thousand dollars (\$5,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation.

- b. In assessing a civil penalty, the County may consider:
 - 1) The harm done to the public health or the environment.
 - 2) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity.
 - 3) The economic benefit gained by the violator.
 - 4) The amount of effort put forth by the violator to remedy this violation.
 - 5) Any unusual or extraordinary enforcement costs incurred by the County.
 - 6) The amount of penalty established by resolution for specific categories of violations.
 - 7) Any equities of the situation that outweigh the benefit of imposing any penalty of damage assessment.
- c. In addition to the civil penalty in subsection (2) above, the County may recover all damages proximately caused by the violator to the County, which may include any reasonable expenses incurred in investigating and enforcing violations of this document.

d. The County may bring legal action to enjoin the continuing violation of this resolution, and the existence of any other remedy, at law or in equity, shall be no defense to any such actions.

e. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal that one (1) or more of the remedies set forth herein has been sought or granted.

f. If a violation of the provisions contained herein occurs during the construction period, all work on the site may be halted by a Stop Work Order until the Director deems corrections are sufficient.

g. Appeals. Any applicant or permit holder may appeal any decision or interpretation of the provisions of this resolution by the Inspector to the Blount County Board of Zoning Appeals

by filing a petition for review with the board within thirty (30) days of such decision or interpretation. No fine shall be rendered until the Appeals Board decision is given. Any person aggrieved by a final decision of the board may seek review by a court of competent jurisdiction.

Section 14 PERFORMANCE BONDS

- a. Prior to plat approval, a performance bond which guarantees satisfactory completion of new development or redevelopment projects may be required for work related to the water quality buffer until project approval by Blount County.
- b. Performance bonds shall name Blount County as beneficiary and shall be guaranteed in the form of a surety bond, cashier's check, or letter of credit from an approved financial institution or insurance carrier. The surety bond, cashier's check, or letter of credit shall be provided in a form in an amount to be determined by Blount County. The actual amount shall be based on submission of plans and estimated construction, installation or potential maintenance and/or remediation expenses.
- c. The Director of the Stonnwater Department may refuse brokers or financial institutions the right to provide a surety bond, letter of credit, or cashier's check based on past performance, ratings of the financial institution, or other appropriate sources of reference information.
- d. A performance bond is not required for an individual residential lot, except when deemed necessary by the Director based on site conditions and the adverse impact on downstream conditions or other properties.

Section 15 REPEAL CLAUSE

The provisions of any ordinances or resolutions or parts thereof in conflict herewith shall not apply, except for ordinances or resolutions or parts thereof which provide stricter standards from those provided herein.

Section 16 CONFLICTS WITH STATE REQUIREMENTS

The State of Tennessee may require water quality buffers during construction activities via provisions contained in the Tennessee Construction General Permit (COP) or other regulatory permits and processes. The State's requirements may, or may not, align with Blount County's requirements and policies for water quality buffers. It is the responsibility of the site owner/developer to be informed and educated on any State-level buffer requirements. If a site owner/developer intends to apply Blount County's buffer requirements in lieu of any requirements of the State of Tennessee, the owner/developer must first obtain approval from TDEC and provide Blount County with written documentation of such approval.

Section 17 EFFECTIVE DATE

NOW, THEREFORE, BE IT RESOLVED by the Blount County Board of Commissioners meeting in regular session on this the / / , that this resolution shall take effect on final passage, the public welfare requiring it.

Duly authorized and approved the / / .

CERTIFICATION OF ACTION:

ATTEST:

Commission Chairman

County Clerk

Approved: ---

Vetoed:

County Mayor

Date