

**WASHINGTON COUNTY, TENNESSEE  
BOARD OF COUNTY COMMISSIONERS**

**RESOLUTION NO. 12-08-08A-2**

**RESOLUTION AMENDING PERMANENT WATER  
QUALITY STORMWATER MANAGEMENT**

WHEREAS, Washington County, Tennessee is required to maintain a Small Municipal Separate Storm Sewer System (**MS4**) permit with the state of Tennessee; and

WHEREAS, Washington County, Tennessee was granted permit number TNS075787 on 1-9-23 with an effective date of 2-1-23, by the state of Tennessee; and

WHEREAS, Washington County, Tennessee is required to revise its ordinances and other regulatory mechanisms for permanent stormwater management to accommodate green infrastructure within 48 months of coverage under this permit as per section 4.1.2 of the permit; and

WHEREAS, Washington County, Tennessee adopted Resolution No. 12-08-06 "*Resolution Creating Peak Stormwater Management and Erosion and Sediment Control*" at the August 27, 2012, regular meeting of the Board of County Commissioners; and

WHEREAS, the revisions attached hereto as Exhibit A are necessary to continue permanent stormwater management to accommodate green infrastructure; and

WHEREAS, at its July 2, 2024 meeting the Washington County Planning Commission recommended consideration and approval of this request to the Board of County Commissioners; now therefore

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY, TENNESSEE THAT:

SECTION 1. The Board of County Commissioners hereby approves the revisions attached hereto as Exhibit A.

SECTION 2. This Resolution shall take effect from and after the date on which it is approved by the County Mayor or as indicated by certification of the County Clerk, as hereinafter set forth.

**Introduced by Commissioner:** *Huffine*

**Seconded by Commissioner:** *Wexler*

**Commissioners Voting FOR:** *Tucker, Johnson, Fitzgerald, Edens, Davenport, Matherly, England, Malone, Tomita, Jones, Wexler, Huffine, Wheeler, Carder*

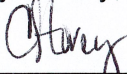
**Commissioners Voting AGAINST:** *Tucker, Johnson, Fitzgerald, Edens, Davenport, Matherly, England, Malone, Tomita, Jones, Wexler, Huffine, Wheeler, Carder*

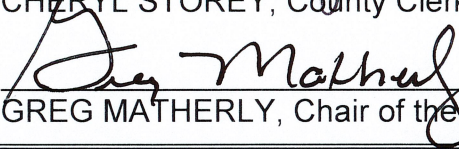
**Commissioners Abstaining:** *None*

**Commissioners Absent:** *None*

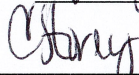
**Vacancy:** District 9

ADOPTED BY THE COUNTY LEGISLATIVE BODY, in session duly assembled, on this the 22<sup>nd</sup> day of July, 2024.

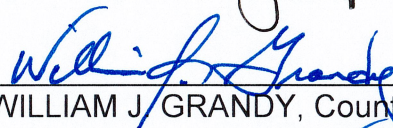
  
\_\_\_\_\_  
CHERYL STOREY, County Clerk

  
\_\_\_\_\_  
GREG MATHERLY, Chair of the Board

REFERRED to County Mayor this the 24 day of July 2024.

  
\_\_\_\_\_  
CHERYL STOREY, County Clerk

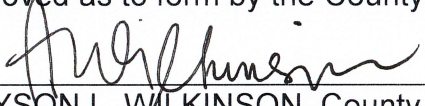
APPROVED by County Mayor on this the 25 day of July 2024.

  
\_\_\_\_\_  
WILLIAM J. GRANDY, County Mayor

The County Mayor having declined to approve this Resolution, the same became effective on the \_\_\_ day of \_\_\_\_\_ 2024, pursuant to Tennessee Code Annotated § 5-6-107(b)(5).

\_\_\_\_\_  
CHERYL STOREY, County Clerk

Approved as to form by the County Attorney this 23<sup>rd</sup> day of July 2024.

  
\_\_\_\_\_  
ALLYSON L. WILKINSON, County Attorney

Delete 516.6 Special Pollution Reduction Requirement and renumber appropriately  
Add to section 516.2 Definitions in appropriate order:

Exceptional Waters of the State: Surface waters of the State of Tennessee that satisfy the characteristics as listed in Rule 1200-4-3-.06 of the official compilation - rules and regulations of the State of Tennessee. Characteristics include waters with exceptional biological diversity or other waters with outstanding ecological or recreational value as determined by the State of Tennessee.

Impaired Waters of the State: Any segment of surface waters that has been identified by the State of Tennessee as failing to support classified uses. The State of Tennessee periodically compiles a list of such waters known as the 303(d) List.

Stormwater control measure (SCM) - Stormwater control measure or SCM means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.

Waters of the State: Defined in the Tennessee Water Quality Control Act and means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine to effect a junction with natural surface or underground waters.

Delete from section 516.2 Definitions:

Water Quality Volume Reduction - A decrease in the water quality volume for one or more areas of a proposed development that is obtained only for specific site development features or approaches that can reduce or eliminate the discharge of pollutants in stormwater runoff. Water quality volume reductions can only be obtained when specific guidelines presented in the Water Quality BMP Manual are met.

Water Quality Volume Reduction Areas - Areas within the proposed development or redevelopment for which a water quality volume reduction can be obtained.

Add after the first paragraph of 516.4.1 the following paragraphs and table

The water quality treatment design storm is a 1-year, 24-hour storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent.

The water quality treatment volume (WQTV) is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm, as set forth below. SCMs must be designed, at a minimum, to achieve an overall treatment efficiency of at least 80% TSS removal from the WQTV.

The quantity of the WQTV depends on the type of treatment provided, as established in the following table:

SCM Treatment Type	WQTV	Notes
infiltration, evaporation, transpiration, and/or reuse	runoff generated from the first 1 inch of the design storm	Examples include, but are not limited to, bioretention, stormwater wetlands, and infiltration systems.
biologically active filtration, with an underdrain	runoff generated from the first 1.25 inches of the design storm	To achieve biologically active filtration, SCMs must provide minimum of 12 inches of internal water storage.
sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds	runoff generated from the first 2.5 inches of the design storm or the first 75% of the design storm, whichever is less	Examples include, but are not limited to, sand filters, permeable pavers, and underground gravel detention systems. Ponds must provide forebays comprising a minimum of 10% of the total design volume. Existing regional detention ponds are not subject to the forebay requirement.
hydrodynamic separation, baffle box settling, other flow-through manufactured treatment devices (MTDs), and treatment trains using MTDs	maximum runoff generated from the entire design storm	Flow-through MTDs must provide an overall treatment efficiency of at least 80% TSS reduction.

The WQTV for a redevelopment project may be reduced by 20% for a redevelopment project. Redevelopment projects include sites with existing impervious surfaces and/or buildings where the overall amount of existing impervious area is maintained or reduced and for brownfield redevelopment.

Permanent SCMs must be installed, implemented, and maintained to meet the performance standards above and provide full treatment capacity within 72 hours following the end of the preceding rain event.

Add to 516.4.3 the word “permanent” between the words “a” and “Vegetated” and the following at the end of the first sentence, after “wetlands” “ or other Waters of the State in accordance with the table below:.”

Delete from 516.4.3 the last sentence and subsections (a) & (b)

Add to 516.4.3 after the first paragraph the following table and two paragraphs:

	Average buffer width (feet)	Minimum buffer width (feet)	Notes
Waters with available parameters for siltation or habitat alteration or unassessed waters	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.
Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration	60	30	

The predominant vegetation within the minimum buffer width area should be trees. The remaining riparian buffers may be composed of herbaceous cover or infiltration-based SCMs.

Water quality riparian buffer widths are measured from the top of bank also referred to as the "ordinary high-water mark."

Delete the following from the first sentence of 516.7.1 "may have to" and replace with "shall".

Add to 516.8.2, subsection 2 at the end of the fourth sentence, after "or landscape architect" the following, ", or other qualified professional familiar with applicable SCM design and maintenance requirements".

516. Permanent Water Quality Stormwater Management (Revised 6-21-2024)

- 516.0 Short title
- 516.1 Purpose
- 516.2 Definitions
- 516.3 General Requirements
- 516.4 Design Criteria
- 516.5 Exemptions
- ~~516.6 Special Pollution Reduction Requirement~~
- 516.7 Final Subdivision Plat and Certificate of Occupancy
- 516.8 Record Drawings and Design Certification
- 516.9 Inspections and Maintenance
- 516.10 Variances
- 516.11 Appeal of Administrative Action
- 516.12 Penalties and Appeals
- 516.13 Severability

## 516. Permanent Water Quality Stormwater Management

516.0 Short title. This Section shall be known as the “Permanent Water Quality Stormwater Management Resolution of Washington County, Tennessee”.

516.1 Purpose. The purpose of this resolution is to conserve the land, water and other natural resources of Washington County; and promote the public health and welfare of the people by establishing requirements for the control of stormwater, by establishing procedures whereby these requirements shall be administered and enforced; and to diminish threats to public safety from degrading water quality caused by stormwater conveying excessive pollutants into our public drainage systems; and to reduce the economic loss to individuals and the community at large.

516.2 Definitions. For the purpose of this resolution, the following definitions shall apply:

Best Management Practices (BMP or BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, Water Quality Management Facilities, structural controls and other management practices designed to prevent or reduce the pollution of waters of the United States. Water quality BMPs may include structural or non-structural practices.

Channel - A natural or man-made watercourse with a defined bottom and banks to confine and convey continuously or periodically flowing stormwater.

County - Washington County, Tennessee.

Construction - Any placement, assembly, or installation of facilities or equipment at the premises where such equipment will be used, including preparation work at such premises.

Covenants for Maintenance of Stormwater Facilities and Best Management Practices - A legal document executed by the property owner, or a homeowners’ association as owner of record, and recorded with the Register of Deeds in Washington County, Tennessee, which guarantees maintenance of Water Quality Management Facilities and Best Management Practices.

Developer - Any person, owner, individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, government entity or any other legal entity, or their legal representative, agents, or assigns who engages in development.

Development - Any land change that alters the hydrologic or hydraulic conditions of any property, often referred to as “site development”. Development includes, but is not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities, roads and other services such as parking facilities, Water Quality Management Facilities and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land.

Development Plan – Detailed engineering or architectural drawing(s) showing existing site conditions and proposed improvements with sufficient detail for County review, approval, and then subsequent construction. The contents of a development plan are further defined by the County Zoning Resolution, Subdivision Regulations, and other County departmental standards for constructing developments and public works projects.

Exceptional Waters of the State: Surface waters of the State of Tennessee that satisfy the characteristics as listed in Rule 1200-4-3-.06 of the official compilation - rules and regulations of the State of Tennessee. Characteristics include waters with exceptional biological diversity or other waters with outstanding ecological or recreational value as determined by the State of Tennessee.

Existing Stormwater Facility – Any existing structural feature that conveys, slows, filters, or infiltrates runoff after a rainfall event.

Hotspot - An area where the land use or activities generate highly contaminated runoff with concentrations of pollutants in excess of those typically found in stormwater.

**Impaired Waters of the State: Any segment of surface waters that has been identified by the State of Tennessee as failing to support classified uses. The State of Tennessee periodically compiles a list of such waters known as the 303(d) List.**

Impervious Surface – A surface comprised of material(s) that prohibits or severely restricts the infiltration of stormwater into the underlying soil such as, but not limited to, asphalt, buildings, concrete, and brick. Compacted stone/gravel such as found in parking and drive areas is also considered impervious.

Lake - An inland body of standing water, usually of considerable size.

NPDES - National Pollutant Discharge Elimination System. NPDES is the program administered by the United States Environmental Protection Agency to eliminate or reduce pollutant discharges to the waters of the United States.

Owner or Property Owner - The legal owner of the property as recorded in the Register of Deeds office in Washington County, Tennessee.

Person - Any individual, firm, corporation, partnership, association, organization or entity, including governmental entities, or any combination thereof.

Pond - An inland body of standing water that is usually smaller than a lake.

Redevelopment - The improvement of a lot(s) or parcel of land that is improved with existing structures. If the existing impervious areas including, but not limited to, buildings and parking remain as is, then this Resolution only applies to the newly-constructed structures and disturbed areas. If the existing impervious areas are removed and then replaced with new impervious areas or newly-graded areas, then this Resolution applies to the entire disturbed area. If impervious areas such as parking lots are removed and replaced without disturbing the soil underneath, those areas are not considered land disturbance with regard to this Resolution. Areas or uses designated as “hotspots” that are redeveloped must provide water quality improvements for not only the new impervious and graded areas but also the existing impervious areas that remain.

**Stormwater control measure (SCM) - Stormwater control measure or SCM means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.**

Sediment - Solid material, either mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by erosion.

Stormwater – Also “Stormwater Runoff” or “Runoff”. Surface water resulting from rain, snow, or other form of precipitation, which is not absorbed into the soil and results in surface water flow.

Stream - For the specific purpose of vegetated buffers, a stream is defined as a linear surface water conveyance that can be characterized with either perennial or ephemeral base flow and is regulated by the County as a Special Flood Hazard Area (SFHA) or has been identified by the United States Army Corps of Engineers or the Tennessee Department of Environment and Conservation as a stream.

Structure – For the purpose of this Resolution, anything constructed or erected such that the use of it requires a more or less permanent location on or in the ground. Such construction includes, but is not

limited to, objects such as buildings, houses, towers, overhead transmission lines, carports, garages, walls, parking areas, driveways, roads, and sidewalks.

TMDL - Total Maximum Daily Load. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the source(s) of the pollutant.

Transporting - Any moving of earth materials from one place to another, other than such movement incidental to grading, as authorized on an approved plan.

Vegetated Buffer - A use-restricted vegetated area that is located along the perimeter of streams, ponds, lakes, or wetlands, containing natural vegetation and/or enhanced or restored vegetation.

Water Quality BMP Manual - A document which contains policies, design standards and criteria, technical specifications and guidelines, maintenance guidelines, and other supporting documentation to be used as the policies and technical guidance for implementation of the provisions of this Resolution. The manual to be used shall be Washington County's manual, if developed, or if it has not been developed then the Northeast Tennessee Water Quality BMP Manual, latest edition, shall be used.

Water Quality Management Facilities - Structural and non-structural features designed to prevent or reduce the discharge of pollution in stormwater runoff from a development or redevelopment.

Water Quality Management Plan - An engineering plan for the design of Water Quality Management Facilities and Best Management Practices within a proposed development or redevelopment. The Water Quality Management Plan includes a plan showing the extent of the land development activity, water quality management facilities, BMPs, vegetated buffers, water quality volume reduction areas, design calculations for water quality management facilities and BMPs, and may contain record drawings/certifications and Covenants for Maintenance of Stormwater Facilities and Best Management Practices along with easements for the water quality management facilities, BMPs, vegetated buffers, water quality volume reduction areas.

~~Water Quality Volume Reduction - A decrease in the water quality volume for one or more areas of a proposed development that is obtained only for specific site development features or approaches that can reduce or eliminate the discharge of pollutants in stormwater runoff. Water quality volume reductions can only be obtained when specific guidelines presented in the Water Quality BMP Manual are met.~~

~~Water Quality Volume Reduction Areas - Areas within the proposed development or redevelopment for which a water quality volume reduction can be obtained.~~

~~Waters of the State: Defined in the Tennessee Water Quality Control Act and means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine to effect a junction with natural surface or underground waters.~~

Wetland - An area that is 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. Wetland determination shall be made by the United States Army Corps of Engineers, the Tennessee Department of Environment and Conservation, or both.

Stormwater Administrator - The Stormwater Administrator of Washington County, Tennessee, or their designee.

- 516.3.1 Owners of land development activities who are not exempted under Subsection 516.5 must submit a Water Quality Management Plan. The Water Quality Management Plan shall be submitted as part of the Site Development Plans as required by the County Zoning Resolution, Subdivision Regulations, and other standards for development plans.
- 516.3.2 The Water Quality BMP Manual to be used shall be Washington County's Manual, if developed, or if it has not been developed, then the Northeast Tennessee Water Quality BMP Manual, latest edition, shall be used.
- 516.3.3 The Water Quality Management Plan shall include the specific required elements that are listed or described in the Water Quality BMP Manual. The Stormwater Administrator may require submittal of additional information in the Water Quality Management Plan as necessary to allow an adequate review of the existing or proposed site conditions.
- 516.3.3 The Water Quality Management Plan shall be subject to any additional requirements set forth in the minimum subdivision regulations, Zoning Resolution, or other County Resolutions and regulations including the Peak Stormwater Management and Erosion and Sediment Control Resolution.
- 516.3.4 Water Quality Management Plans shall be prepared and stamped by a design professional qualified to prepare stormwater and site plans in accordance with State of Tennessee law.
- 516.3.5 Other State or Federal permits that may be necessary for construction in and around streams or wetlands, or both, shall be approved prior to approval of a Water Quality Management Plan by the County.
- 516.3.6 The approved Water Quality Management Plan shall be adhered to during grading and construction activities. Under no circumstance is the owner or operator of land development activities allowed to deviate from the approved Water Quality Management Plan without prior approval of a plan amendment by the Stormwater Administrator.
- 516.3.7 The approved Water Quality Management Plan shall be amended if the proposed site conditions change after plan approval is obtained, or if it is determined by the Stormwater Administrator during the course of grading or construction that the approved plan is inadequate.
- 516.3.8 The Water Quality Management Plan shall include a listing of any known legally protected state or federally listed threatened or endangered species or critical habitat located in the area of land disturbing activities and a description of the measures that will be used to protect them during and after grading and construction.
- 516.3.9 Water quality management facilities, BMPs, vegetated buffers, and water quality volume reduction areas shown in Water Quality Management Plans shall be maintained through Covenants for Maintenance of Stormwater Facilities and Best Management Practices or other legal means as determined by the Stormwater Administrator. The other means must be legally enforceable to ensure ownership, maintenance responsibility, and inspection requirements are provided for in perpetuity. The Covenants or other legal means must be approved by and shall be enforceable by the County. The Covenants shall be recorded with the Register of Deeds at the Washington County Courthouse and shall run with the land and continue in perpetuity.
- 516.3.10 Water quality management facilities, BMPs, vegetated buffers and water quality volume reduction areas shown in Water Quality Management Plans shall be placed into a permanent Stormwater Facilities and Best Management Practices Easement held by the County that is recorded with the Register of Deeds at the Washington County Courthouse and shall run with the land and continue in perpetuity.

- 516.3.11 A maintenance right-of-way or easement, having a minimum width of fifteen (15) feet, shall be provided to all water quality management facilities, BMPs, vegetated buffers and water quality volume reduction areas from a driveway, public road, or private road.
- 516.3.12 Owners of land development activities not exempted from submitting a Water Quality Management Plan may be subject to additional watershed or site-specific requirements than those stated in this Resolution in order to satisfy other local, State, and Federal water quality requirements. Areas subject to additional requirements may also include developments, redevelopments, or land uses that are considered pollutant hotspots or areas where the Stormwater Administrator has determined that additional restrictions are needed to limit adverse impacts of the proposed development on water quality or channel protection.
- 516.3.13 The Stormwater Administrator may waive or modify any of the requirements of Subsection 516.4 of this Resolution if adequate water quality treatment and channel protection are suitably provided by a downstream or shared off-site Water Quality Management Facility, or if engineering studies determine that installing the required Water Quality Management Facilities or BMPs would actually cause adverse impact to water quality or cause increased channel erosion or downstream flooding. Adequate documentation must be provided to the Stormwater Administrator to support a determination pursuant to this Subsection.
- 516.3.14 This Resolution is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, or existing Resolutions and regulations. If provisions of this Resolution and another regulation conflict, that provision which is more restrictive or imposes higher standards or requirements shall control.

516.4 Design Criteria

- 516.4.1 All owners of developments or redevelopments who must submit a Water Quality Management Plan shall provide treatment of Stormwater Runoff in accordance with the following requirements:

The water quality treatment design storm is a 1-year, 24-hour storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent.

The water quality treatment volume (WQTV) is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm, as set forth below. SCMs must be designed, at a minimum, to achieve an overall treatment efficiency of at least 80% TSS removal from the WQTV.

The quantity of the WQTV depends on the type of treatment provided, as established in the following table:

SCM Treatment Type	WQTV	Notes
infiltration, evaporation, transpiration, and/or reuse	runoff generated from the first 1 inch of the design storm	Examples include, but are not limited to, bioretention, stormwater wetlands, and infiltration systems.

biologically active filtration, with an underdrain	runoff generated from the first 1.25 inches of the design storm	To achieve biologically active filtration, SCMs must provide minimum of 12 inches of internal water storage.
sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds	runoff generated from the first 2.5 inches of the design storm or the first 75% of the design storm, whichever is less	Examples include, but are not limited to, sand filters, permeable pavers, and underground gravel detention systems. Ponds must provide forebays comprising a minimum of 10% of the total design volume. Existing regional detention ponds are not subject to the forebay requirement.
hydrodynamic separation, baffle box settling, other flow-through manufactured treatment devices (MTDs), and treatment trains using MTDs	maximum runoff generated from the entire design storm	Flow-through MTDs must provide an overall treatment efficiency of at least 80% TSS reduction.

The WQTV for a redevelopment project may be reduced by 20% for a redevelopment project. Redevelopment projects include sites with existing impervious surfaces and/or buildings where the overall amount of existing impervious area is maintained or reduced and for brownfield redevelopment.

Permanent SCMs must be installed, implemented, and maintained to meet the performance standards above and provide full treatment capacity within 72 hours following the end of the preceding rain event.

1. The Stormwater Runoff from the site must be treated for water quality prior to discharge from the site in accordance with the Stormwater treatment standards and criteria provided in the Water Quality BMP Manual and as found in the Peak Stormwater Management and Erosion and Sediment Control Resolution.
2. The treatment of Stormwater Runoff shall be achieved through the use of one or more Water Quality Management Facilities and BMPs that are designed and constructed in accordance with the Water Quality BMP Manual.
3. Methods, designs, or technologies for Water Quality Management Facilities or BMPs that are not provided in the Water Quality BMP Manual may be submitted for approval by the Stormwater Administrator if it is proven that such methods, designs, or technologies will meet or exceed the stormwater treatment standards set forth in the Water Quality BMP Manual and this Resolution.

4. BMPs shall not be installed within public rights-of way or on public property without prior approval of the Stormwater Administrator.

516.4.2 All owners of developments or redevelopments who are required to submit a Water Quality Management Plan shall provide downstream channel erosion protection in accordance with design criteria stated in the Water Quality BMP Manual. Downstream channel erosion protection can be provided by an alternative approach in lieu of controlling the channel protection volume subject to approval by the Stormwater Administrator. Sufficient hydrologic and hydraulic analysis that shows that the alternative approach will offer adequate channel protection from erosion must be provided to the Stormwater Administrator to support a determination made pursuant to this Subsection.

516.4.3 All owners of developments or redevelopments who require a grading permit, plan approval, or subdivision approval shall establish, protect, and maintain a permanent Vegetated Buffer along all streams, ponds, rivers, lakes, and wetlands, or other Waters of the State in accordance with the table below. ~~The buffer widths are based on the drainage area to the point along the stream where the buffer is being determined:~~

- ~~(a) For Drainage areas less than 1 square mile, the buffer is 30 feet.~~
- ~~(b) For drainage areas 1 square mile or more, the buffer is a 60-foot average with a 30-foot minimum width. To use the 60-foot average, 30-foot minimum method, it must be shown that the straight 60-foot width would be a hardship to developing the property and may not be based solely on the difficulty or the cost of implementation.~~

	Average buffer width (feet)	Minimum buffer width (feet)	Notes
Waters with available parameters for siltation or habitat alteration or unassessed waters	30	15	The criteria for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than the required minimum width at any measured location. If the new development or redevelopment site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.
Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration	60	30	

~~The predominant vegetation within the minimum buffer width area should be trees. The remaining riparian buffers may be composed of herbaceous cover or infiltration-based SCMs.~~

~~Water quality riparian buffer widths are measured from the top of bank also referred to as the "ordinary high-water mark."~~

~~If it is not practical to provide the required buffer or only a portion of the buffer can be provided, approval through the Washington County Stormwater Board of Appeals must be obtained. Justification for this variance must be made in accordance with the Stormwater Board of Appeals criteria.~~

Exemptions from this requirement are as follows:

1. Vegetated Buffers are not required around the perimeter of ponds that have no known connection to streams, other ponds, lakes, rivers, or wetlands.
2. Vegetated Buffers are not required around Water Quality Management Facilities, BMPs, or detention ponds that are designed, constructed, and maintained for the purposes of water quality, quantity control, or both, unless expressly required by the design standards and criteria for the facility that are provided in the Water Quality BMP Manual.

516.4.4 In addition to the above requirements, all owners of developments or redevelopments who must submit a Water Quality Management Plan shall:

1. Provide erosion prevention and sediment control in accordance with the Resolutions and Regulations of the County;
2. Control stormwater drainage onsite and provide peak stormwater management in accordance with the Resolutions and Regulations of the County; and
3. Adhere to all local floodplain development requirements in accordance with Resolutions and Regulations of the County.

#### 516.5 Exemptions

516.5.1 Owners of developments and redevelopments who conform to the criteria in Subsection 516.5.3 are exempt from the requirements of this Resolution, unless the Stormwater Administrator has determined that treatment of Stormwater Runoff for water quality is needed to order to satisfy local or State NPDES, TMDL, or other regulatory water quality requirements, or the proposed development will be a pollutant Hotspot, or to limit adverse water quality or channel protection impacts of the proposed development.

516.5.2 The exemptions listed in Subsection 516.5.3 shall not be construed as exempting these owners of developments and redevelopments from compliance with stormwater requirements stated in the minimum Subdivision Regulations, Zoning Resolution, or other County Resolutions and regulations including peak stormwater management and erosion prevention and sediment control.

516.5.3 The following developments and redevelopments are exempt from the requirements for a Water Quality Management Plan:

1. Developments or redevelopments that disturb less than one (1) acre of land. No exemption is granted if the development or redevelopment is part of a larger common plan of development or sale that would potentially disturb one (1) acre or more and the Stormwater Runoff from the development or redevelopment is not treated for water quality via a downstream or regional Water Quality Management Facility or BMP that meets the requirements of this Resolution;
2. Minor land disturbing activities such as residential or non-residential repairs, landscaping, or maintenance work;
3. Public utility service connections, unless such activity is carried-out in conjunction with the clearing, grading, excavating, transporting, or filling of a lot or lots for which a Water Quality Management Plan would otherwise be required;
4. Installation, maintenance, or repair of individual septic tank lines or drainage fields, unless such activity is carried out in conjunction with the clearing, grading, excavating, transporting, or filling of a lot or lots for which a Water Quality Management Plan would otherwise be required;

5. Agricultural activities;
6. Emergency work to protect life, limb, or property, and emergency repairs.

~~516.6 Special Pollution Reduction Requirements~~

~~516.6.1 — A Special Pollution Reduction Plan shall be required for the following land uses, which are considered pollutant Hotspots:~~

- ~~1. Vehicle, truck or equipment maintenance, fueling, washing or storage areas including but not limited to: automotive dealerships, automotive repair shops, and car wash facilities;~~
- ~~2. Recycling and/or salvage yard facilities;~~
- ~~3. Restaurants, grocery stores, and other food service facilities;~~
- ~~4. Commercial facilities with outside animal housing areas including animal shelters, fish hatcheries, kennels, livestock stables, veterinary clinics, or zoos;~~
- ~~5. Other producers of pollutants identified by the Stormwater Administrator as a pollutant Hotspot using information provided to or collected by him or his representatives, or reasonably deduced or estimated by him or his representatives from engineering or scientific study.~~

~~516.6.2 — A Special Pollution Reduction Plan may be required for land uses or activities that are not identified by this Resolution as Hotspot land uses but are deemed by the Stormwater Administrator to have the potential to generate concentrations of pollutants in excess of those typically found in stormwater.~~

~~516.6.3 — The Special Pollution Reduction Plan shall be submitted as part of the Water Quality Management Plan and the BMPs submitted on the plan shall be subject to all other provisions of this Resolution.~~

~~516.6.4 — Best Management Practices specified in the Special Pollution Reduction Plan must be appropriate for the pollutants targeted at the site.~~

~~516.6.5 — A Special Pollution Reduction Plan will be valid for a period of five (5) years, at which point it must be renewed. At the time of renewal, any deficiency in the pollutant management method must be corrected.~~

516.7 Final Subdivision Plat and Certificate of Occupancy

516.7.1 Before a final subdivision plat can be approved or a Certificate of Occupancy issued, all construction work related to Water Quality Management Facilities, channel protection, and/or the establishment of Vegetated Buffers must be completed and accepted by the Stormwater Administrator or a performance bond must be provided in accordance with Subsection 516.7.2. Final plat approval or certificate of occupancy may be granted if items in 516.7.3 and 516.7.4 are completed or if a performance bond guarantees their completion.

516.7.2 Any Performance Bond must be in a form satisfactory to and approved by the County Attorney, and it must be properly executed and filed with the Stormwater Administrator. A project cost summary must accompany the application so that it can be used to help determine the bond amount. The bond may not be higher than an amount equal to the estimated cost of the improvements plus an additional twenty-five percent (25%), and said bond shall only be

released by the Stormwater Administrator following completion of construction work related to Water Quality Management Facilities, channel protection, and/or the establishment of Vegetated Buffers. The Planning Commission shall determine the date the bond will become due, but in no event will this period exceed one year. Any performance bond shall become due upon the Developer's failure to comply with the terms and requirements of any Notice of Non-Compliance properly issued pursuant to Subsection 516.12 of this Section. Upon the posting of the bond, the Developer must sign and have notarized a grant of authority to Washington County to implement the construction work related to Water Quality Management Facilities, BMPs, channel protection, and/or the establishment of Vegetated Buffers upon Developer's failure to comply with the Water Quality Management Plan or the Notice of Non-Compliance.

516.7.3 Prior to approval of a final subdivision plat, release of a performance bond, or the issuance of a Certificate of Occupancy, the property owner or developer shall provide the County with an executed and recorded copy of the protective covenants and an executed and recorded copy of the easement plat showing the easements associated with the locations of the Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, Water Quality Volume Reduction Areas, and access easements to said facilities.

516.7.4 Prior to approval of a final subdivision plat, release of a performance bond, or the issuance of a Certificate of Occupancy, the property owner or developer may have to provide the County with an accurate record drawing of the property for all the Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, and Water Quality Volume Reduction Areas. A record drawing may be required by the Stormwater Administrator if their site inspection determines that the constructed Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, and Water Quality Volume Reduction Areas do not appear to match the approved plans and calculations.

#### 516.8 Record Drawings and Design Certification

516.8.1 Prior to approval of a final subdivision plat, release of a performance bond, or the issuance of a Certificate of Occupancy, the property owner or developer ~~may have to~~ shall provide the County with an accurate record drawing of the property for all the Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, and Water Quality Volume Reduction Areas. A record drawing may be required by the Stormwater Administrator if their site inspection determines that the constructed Best Management Practices, Water Quality Management Facilities, Vegetated Buffers, and Water Quality Volume Reduction Areas do not appear to match the approved plans.

516.8.2 The boundaries of Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas shall be shown on the record drawings along with any other information in accordance with guidance provided in the Water Quality BMP Manual.

516.8.3 Record drawings shall include sufficient design information to show that Water Quality Management Facilities required by this Resolution will operate as approved. This shall include all necessary computations used to determine percent pollutant removal and the flow rates and treatment volumes required to size Water Quality Management Facilities and BMPs.

516.8.4 The easements associated with the Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas shall be shown on the record drawings along with any other information in accordance with guidance provided in the Water Quality BMP Manual.

516.8.5 The record drawings shall be stamped by the appropriate design professional required to stamp the Water Quality Management Plan or a registered land surveyor licensed to practice in the State of Tennessee.

516.9 Inspections and Maintenance

516.9.1 Right of Entry

1. During and after construction, the Stormwater Administrator may enter upon any property which has a Water Quality Management Facility, BMP, Vegetated Buffer, or Water Quality Volume Reduction Area during all reasonable hours to inspect for compliance with the provisions of this Resolution, or to request or perform corrective actions.
2. Failure of a property owner to allow such entry onto a property for the purposes set forth in Subsection 516.9 shall be cause for the issuance of a violation, stop work order, withholding of a certificate of occupancy, and/or civil penalties.

516.9.2 Requirements

1. The owner(s) of Existing Stormwater Facilities, Water Quality Management Facilities, BMPs, Vegetated Buffers, and Water Quality Volume Reduction Areas shall inspect and maintain all devices and areas in accordance with the Covenants for Maintenance of Stormwater Facilities and Best Management Practices.
2. Inspection and maintenance of privately-owned Existing Stormwater Facilities, Water Quality Management Facilities, Best Management Practices, Vegetated Buffers, and Water Quality Volume Reduction Areas shall be performed at the sole cost and expense of the owner(s) of such facilities/areas. The Best Management Practices owner shall perform routine inspections on at least an annual basis. Inspections shall be performed by a person familiar with the control measures. The Best Management Practices owner shall maintain documentation of these inspections. A comprehensive inspection of all BMPs shall be conducted once every 5 years by a professional engineer or landscape architect **. or other qualified professional familiar with applicable SCM design and maintenance requirements**. Records stating the BMP, date, latitude/longitude, address, BMP owner information, description of BMP, photos of BMP and any corrective action needed and when performed shall be maintained by the BMP owner.
3. Inspections and maintenance shall be performed in accordance with specific requirements and guidance provided in the Covenants for Maintenance of Stormwater Facilities and Best Management Practices and the Water Quality BMP Manual. Inspection and maintenance activities shall be documented by the property owner (or his/her designee), and such documentation shall be maintained by the property owner for a minimum of three (3) years, and shall be made available for review by the Stormwater Administrator upon request.
4. The Stormwater Administrator has the authority to impose more stringent inspection requirements as necessary for purposes of water quality protection and public safety.
5. The removal of sediment or other debris from Existing Stormwater Facilities, Water Quality Management Facilities, and Best Management Practices shall be performed in accordance with all County, State, and Federal laws and the Water Quality BMP Manual. The Stormwater Administrator may stipulate additional guidelines if deemed necessary for public safety.
6. The Stormwater Administrator may order corrective actions to Best Management Practices, Existing Stormwater Facilities, Water Quality Management Facilities, Vegetated Buffer areas, or Water Quality Volume Reduction Areas as are necessary to properly maintain the facilities/areas within the County for the purposes of water quality

treatment, channel erosion protection, adherence to local performance standards, or public safety. When corrective action is required, the BMP owner must initiate the correction action within 30 days of notice. If the property owner(s) fails to perform corrective action(s), the Stormwater Administrator shall have the authority to order the corrective action(s) to be performed by the County or others. In such cases where a performance bond exists, the County shall utilize the bond to perform the corrective actions. In such cases where a performance bond does not exist, the cost of labor, equipment, and materials used will be charged to the Developer/Owner in addition to a service charge of \$100.00 per hour. The County will invoice the Developer/Owner directly, and payment shall be received within fourteen (14) days. Failure to pay for remedial actions taken by the County under this Section may result in the County Attorney filing a lien against the property involved in the action, and may negate any intention by the County to accept responsibility for any Best Management Practices, Existing Stormwater Facilities, Water Quality Management Facilities, Vegetated Buffer areas, or Water Quality Volume Reduction Areas. The decision of the County to take remedial actions to protect the health and safety of the public in no way supplants or negates the authority of the appropriate County Staff to issue citations for violations of this Resolution.

- 516.9.3 Any alteration, improvement, or disturbance to Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas shown in the Water Quality Management Plan, certified record drawings, and/or easement plats shall be prohibited without authorization from the Stormwater Administrator. This does not include alterations that must be made in order to maintain the intended performance of the Water Quality Management Facilities, BMPs, Vegetated Buffers, or Water Quality Volume Reduction Areas.

516.10 Variances

- 516.10.1 Request for variances from the requirements of this Resolution shall be made to the Board of Zoning Appeals.
- 516.10.2 The Board of Zoning Appeals shall not approve variances that cause the County to be in violation of any state or Federal NPDES permit, TMDL, or other applicable water quality regulation.

516.11 Appeal of Administrative Action.

Actions taken by the Stormwater Administrator as authorized in this Resolution are subject to appeal by the Board of Zoning Appeals per Zoning Resolution, Article IX, provided an appeal is timely filed in writing at the office of the Stormwater Administrator within ten (10) days from the date any written or verbal decision has been made which the Developer believes adversely affects the Developer's rights, duties or privileges to engage in the land disturbing activity and/or associated development proposed.

516.12 Penalties and Appeals

Please refer to section 513.26 of the Washington County, Tennessee Zoning Ordinance, Peak Stormwater Management, Erosion and Sedimentation Control.

516.13 Severability

If any provision of this Resolution is held to be unconstitutional or invalid, such unconstitutionality or invalidity shall not affect any other provision of this Resolution.