Town of Garner Stormwater Program for Nitrogen Control



May 1, 2023

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1: Certification

By my signature below I hereby certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

I am also aware that the contents of this document shall become an enforceable part of the Local Program, and that NCDEQ has enforcement authority.

I am a ranking elected official for Town of Garner.

I am a principal executive officer for Town of Garner.

I am a duly authorized representative for Town of Garner and have attached the authorization made in writing by a principal executive officer or ranking elected official which specifies me as (check one):

A specific individual having overall responsibility for stormwater matters.

Signature:

Signature:	Rodney Dirkerson	
Print		
Name:	Rodney Dickerson	
Title:	Town Manager	
Signed this 28 day of 2021, DECEMBER		

2: Introduction

The purpose of this Neuse Stormwater Local Program is to establish and define the means by which the Town of Garner will comply with the requirements of the Neuse nutrient stormwater rule (henceforth, "Rule") (15A NCAC 02B .0711).

On December 11, 1997 the North Carolina Environmental Management Commission (EMC) adopted permanent rules to support implementation of the Neuse River Nutrient Sensitive Waters Management Strategy (Neuse NSW Strategy). The goal of the strategy was to achieve a 30 percent nitrogen reduction from each controllable and quantifiable source of nitrogen in the basin. These sources are point source discharges associated with wastewater treatment plants and nonpoint source discharges associated with agriculture operations and urban stormwater runoff.

As a part of the rules fifteen local governments in the Neuse Basin, including the Town of Garner, were required to implement local stormwater management plans aimed at achieving the 30 percent nitrogen reduction goal as it relates to the nonpoint urban stormwater runoff component.

In order to assist the local governments in developing these stormwater management plans the North Carolina Division of Environmental Quality (DEQ) along with representatives from each of the fifteen affected local governments developed a model stormwater management plan served as the basis for a local government's stormwater management plan. The stormwater management plan for the Town of Garner closely followed the model plan. As such, some of the components of the model plan were incorporated directly into Garner's local plan while other components were modified. These rules were originally implemented February 17, 2001.

The Neuse Nutrient Management Strategy was updated and revised effective April 1, 2020, pursuant to the legislatively mandated periodic rules review process codified at NCGS Ch. 150B-21.3A. Included were revised rules addressing post-construction stormwater control on new development. These rules were readopted as Neuse Nutrient Strategy: Stormwater, 15A NCAC 02B.0711. A requirement of these rules was the submission of new local implementation programs for newly added communities, and revision of Local Programs for communities subject to the older versions of the rules (15A NCAC 02B.0235).

The new and updated rules explicitly define applicability and disturbance thresholds to meet relevant parts of the DEMLR 02H stormwater rules effective in 2017.

The rules require that five general elements be addressed in the local government stormwater management plan. These elements are as follows: New Development Review/Approval, Stormwater Mapping Program, Illicit/Illegal Discharges, Post Construction Site Runoff Controls, and Public Education.

Within each element there are certain minimum requirements that must be addressed in order to

comply with the rules. Some of these requirements involve certain actions and programs that must be undertaken by the Town of Garner. These requirements are addressed specifically in this plan. Other requirements involve the legislation and enforcement of development guidelines and land use regulations within the community. These requirements are addressed generally within this plan and are accompanied with specific ordinances that will be incorporated in the Town's Land Use Ordinance and/or Town Code.

This Local Program identifies the specific elements and minimum measures that the Town of Garner will develop, implement, enforce, evaluate and report to the North Carolina Department of Environmental Quality (NCDEQ) Division of Water Resources (DWR) to comply with the requirements of the Rule. This Local Program covers activities associated with the discharge of nutrients in stormwater from the Town of Garner. The Local Program will be evaluated annually, and updated as needed, to ensure that the elements and minimum measures it contains continue to adequately provide for Rule compliance.

Once the Local Program is approved by NCDEQ and the Environmental Management Commission (EMC), all provisions contained and referenced in it, along with any approved modifications, become enforceable.

Town of Garner Existing Local Programs Currently in Place

In addition to the Neuse Nutrient Management Strategy rule, the Town of Garner currently has one other local program in place. The Water Supply Watershed Protection plan in conjunction with the Swift Creek Land Management Plan was approved by EMC in 1995. This plan does not cover the entire jurisdiction, but the area in Garner's jurisdiction that drains to Lake Benson. The Swift Creek Land Management Plan includes low and high-density options for development with payments made towards the development of a regional retention pond in the 1990s. The Town never built a regional retention pond, but instead smaller individual primary SCMs (mostly wet retention ponds) were built and implemented to meet the fee in-lieu collected for TSS in the 1990s. After the Neuse Rules were implemented in 2001, development sites could no longer pay a fee in lieu for TSS and then were required to implement stormwater control measures onsite as part of the development approval process to meet all stormwater requirements for the Neuse Rules as well as the Water Supply Watershed rules.

State Programs

The Town of Garner currently regulates the NPDES Phase II MS4 Program, which was first permitted and implemented in 2005 and has jurisdiction over the total area of the Town of Garner. This permit was renewed in 2012, 2017 and is currently up for review for a projected 2023 renewal. The six minimum measures of this program are public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site runoff controls, post-construction site runoff controls, and pollution prevention and good housekeeping for municipal operations.

Organizational Structure

The Town of Garner has one funded position, the Stormwater Program Administrator, who is responsible for implementation of the Local Programs, State Program and permit compliance. This position is housed within the Engineering Department but works closely with other departments such as Public Works, Inspections and Planning to comply with all aspects of the stormwater permit. The Stormwater Program Administrator works closely with Development Services (Planning Department and Inspections Department) to complete site plan and construction drawing review of all development projects as well as with Public Works for all aspects that pertain to the good housekeeping and pollution prevention minimum measure. This position is also responsible for public education and outreach and public involvement. The Town maintains a partnership with the Clean Water Education Partnership (CWEP) that is run through Triangle J Council of Governments for mass media and public involvement opportunities as well. The Stormwater Program Manager produces target pollutant PSAs for the Town with the help of the Communications Specialist that run on social media and Garner's cable access channel. The Stormwater Program Administrator is also responsible for the Illicit Discharge Detection and Elimination program (complaints, education, and dry weather screening) as well as administering post construction stormwater runoff compliance for publicly and privately owned stormwater control measures for maintenance compliance.

Shared Responsibility

The Town of Garner will share the responsibility to implement Construction Site Runoff Controls with Wake County and has a partnership with the Clean Water Education Partnership (CWEP) for stormwater education. The legal agreement for Construction Runoff Controls with Wake County can be found as Appendix A. Memorandum of agreement with the Clean Water Education Partnership and the Town of Garner can be found as Appendix B.

Program Funding and Budget

In accordance with the issued Stormwater Program, the Town of Garner shall maintain adequate funding and staffing to implement and manage the provisions of the Neuse Stormwater Rule and comply with the requirements of the Rule. Currently there is one funded position for stormwater within the Town of Garner and that position is the Stormwater Program Administrator. Heavy equipment like the street sweeper or drainage repair projects are funded through the Town of Garner's general fund and evaluated on a year-by-year basis as needed.

Annual Reporting

Annual reporting shall be completed for the fiscal year that runs July 1 through June 30 and is due on October 30th of each year. Annual reporting shall be separate from the NPDES MS4 annual report and shall include general metrics for all Neuse Requirements as well as raw data for the most recent tool approved by the State for nitrogen calculations. Any significant changes that have affected the program (staff changes, extreme weather events, etc.) shall be noted as well as any changes or updates to relevant ordinances, SOPs or programs.

Annual Program Administration Assessment

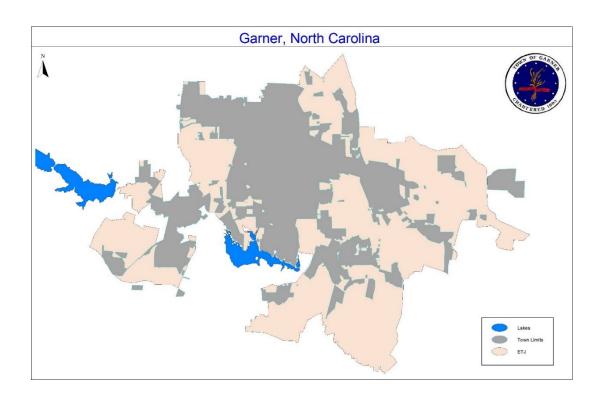
The Town of Garner will manage and report the following best management practices (BMPs) for administration of the Local Program below. The annual reporting and assessment period runs from July 1 to June 30 every year and is part of the annual reporting requirements required to be submitted to comply with the requirements of the Neuse Nutrient Management Strategy. This annual assessment is to be submitted to the Division of Water Resources (DWR) by October 30 each year.

- Perform an annual evaluation of the Local Program implementation, sustainability of Local Program commitments and any proposed changes to the Local Program. This should include reporting annual metrics as well as evaluating any of those metrics to propose changes to the program for the upcoming year.
- Review annual budget for the Local Program to ensure there is adequate funding to continue with a sustainable Local Program. Determine if more funding or staffing is required to implement the Neuse Nutrient Management Strategy and if so, plan for that within the next budget cycle and report findings to the DWR.
- Audit Local Program annually to ensure compliance with the Neuse Rules and the Town of Garner Stormwater Program for Nitrogen Control Local Program document. Participate in an audit of the Local Program with Neuse Nutrient Management Strategy that is to be scheduled with NCDEQ upon request with NCDEQ.

Annual Reporting

Annual reports shall be specifically for the Town of Garner Stormwater Program for Nitrogen Control Local Program and not merged with any NPDES Phase II MS4 annual reports. The annual reporting period runs from July 1 through June 30 every year. The annual report submitted to the DWR shall include any changes planned for any of the elements within the Local Program, whether any changes were made during the over the past year of the reporting period (such as, but not limited to, ordinance changes, SOPs, programs, etc.) as well as any significant events or situations that may have affected the program implementation that happened during the reporting period. These changes can include, but are not limited to: staff changes, weather events, pandemics, local government organization restructuring, etc. The annual report should also clarify if there are any changes planned to the upcoming year's Memorandum of Agreement with the Clean Water Education Partnership (CWEP) for public education.

3: Town of Garner Map subject to Neuse Stormwater Rule



Local Program Area

The Neuse Nutrient Management Strategy stormwater rules are applicable throughout the limits of the Town of Garner's jurisdiction which include city limits as well as the extraterritorial jurisdiction, including all regulated activities associated with the discharge of stormwater. The map above shows the entire area (town limits and ETJ) regulated by the Town of Garner for implementation of the Neuse Nutrient Management Strategy as of the date of this document.

The existing storm drain system within the Town of Garner consists primarily of reinforced concrete pipe with some corrugated metal pipe as well as some high-density polyethylene (HDPE) and polypropropylene (PP) pipe used in mainly residential and commercial areas. Most of the storm water enters the system through catch basins and some yard inlets. About 95 percent of the Town of Garner has been mapped in GIS with the other 5% being newer developments from the past year or so.

4: List of Receiving Waters

The Town of Garner is located within the Neuse River Basin and discharges directly into receiving waters as listed in Table 1 below. Applicable water quality standards listed below are compiled from the following NCDEQ sources:

- Waterbody Classification Map
- o Impaired Waters and TMDL Map
- o Most recent NCDEQ Final 303(d) List

Table 1: Summary of Town of Garner Receiving Waters

Receiving Water Name	Stream	Water Quality	303(d) Listed
	Index / AU	Classification	Parameter(s)
	Number		of Interest
Swift Creek (Lake Benson)	27-43-(5.5)	WS-III; NSW,	Ecological/Benthos
		CA	
Buck Branch	27-43-6-(1)	WS-III; NSW	
Buck Branch	27-43-6-(2)	WS-III; NSW,	
		CA	
Reedy Branch	27-43-7-(1)	WS-III; NSW	
Reedy Branch	27-43-7-(2)	WS-III; NSW,	
		CA	
Mahler's Creek	27-43-9	C; NSW	
White Oak Creek (Austin Pond)	27-43-11	C; NSW	
Unnamed Tributary to Swift	27-43-5-(2)	WS-III; NSW,	
Creek		CA	
Bagwell Branch		Not Classified	
Echo creek		Not Classified	

Interconnection

The Town of Garner is not interconnected with any another regulated Town or jurisdiction other than NCDOT and directly discharges to the receiving waters as listed in Table 1 above. However, a majority of surrounding cities and towns flow to the Neuse River and are subject to the Neuse Stormwater Rules.

5. New Development Review and Approval

Requirements in the Rule

The Neuse Stormwater Rule (15A NCAC 02B.0711) has certain requirements for new development. These requirements are incorporated as a part of this plan and are as follows:

- All projects to which apply to the Neuse requirements shall have enforceable restriction on property usage that runs with the land, such as a recorded deed restriction or protective covenants, to ensure that future development and expansion of development maintains site consistent with the approved project plans.
- New development shall comply with the requirements for protecting and maintaining riparian buffers as specified in 15A NCAC 2B .0233.
- All State and Federal development projects shall be reviewed by the North Carolina Department of Energy, Minerals and Land Resources (NCDEMLR).
- Disturbance thresholds for new development shall be limited to greater than 1 (one) acre for single family and duplex residential property and recreational facilities and greater than 0.5 (one-half) acre for commercial, industrial, institutional, multifamily residential, or local government land uses with the following exception: Projects below one-half acre that would replace or expand existing structures on a parcel, resulting in a cumulative built-upon area for the parcel exceeding twenty-four (24%) percent.
- The nutrient load contributed by new development activities is held at 3.6 pounds per acre per year.
- Developers shall have the option of partially offsetting projected nitrogen loads by funding wetland or riparian area restoration through private mitigation banks or through payment into the Riparian Buffer Restoration Fund established in N.C.G.S. 143-214.21.
- Developers shall provide onsite stormwater treatment for all cumulative built-up-area (BUA) if the project density is greater than twenty-four (24%) percent and must meet other low density, high density and other requirements of DEMLR's 02H .1003 Stormwater Rule.
- Proposed development projects may utilize an off-site SCM that is dedicated to treating an area encompassing the project, provided the SCM is designed to meet all the applicable requirements identified in 15A NCAC 02B .0711 5(b).
- Proposed development undertaken by a local government solely as a public road expansion or public sidewalk project, or proposed development subject to the jurisdiction of the Surface Transportation Board, may meet the loading rate target of this item entirely through use of permanent nutrient offset credit pursuant to Rule .0703.

- Projects that meet the definition of "runoff volume match" do not need to future address nutrient export. Although projects will still need to submit calculations through the most recent tool and include any SCMs that are used on the development site. Runoff Volume Match is defined as the annual runoff volume after development that shall not be more than ten percent higher than the annual runoff volume before development, except in areas subject to SA waters requirements where runoff volume match means that the annual runoff volume after development shall not be more than five percent higher than the annual runoff volume before development.
- Untreated nutrient loading rates from the project acre shall be determined through the use of the tool most recently approved by the Division to have met the following criteria, or through an alternative method that meets or exceeds the following criteria, as determined by the division:
 - (i) Provides site-scale estimates of annual precipitation-driven total nitrogen load;
 - (ii) From all land cover types on a project site at build-out;
 - (iii) Based on land-cover-specific nitrogen loading coefficients and annual runoff volume; and
 - (iv) Is supported by the weight of evidence from available, current, and applicable research.
- Nutrient loading rate reductions resulting from the use of SCMs shall be determined through the use of the tool most recently approved by the Division to have met the following criteria, or through an alternative method that meets or exceeds the following criteria, as determined by the Division:
 - (i) Provides project site loading reduction estimates from the installation of Department of Energy, Mineral and Land Resources (DEMLR) approved SCMs;
 - (ii) Reductions apply to the portion of the project's runoff volume that is directed to the SCMs;
 - (iii) The method partitions the runoff volume processed by the SCM among hydrologic fates and assigns nutrient concentrations to each of those fates; and
 - (iv) The method is supported by the weight of evidence from available, current, and applicable research.
- Except in certain situations, stormwater detention will be required on new projects. The design standard for detention will be based upon peak flow reduction to predevelopment (existing) conditions for the 1 year, 10 year, 25 year and in some cases the 100 year return frequency storm events.

The nitrogen loading standards are supplemental to, not replacements for, stormwater standards otherwise required by federal, state or local law, including without limitation any riparian buffer requirements applicable to the location of the development. This includes, without limitation, the riparian buffer protection requirements of 15A NCAC 02B .0233.

Section 11.2 of the Garner Unified Development Ordinance requires that all new development comply with the provisions of this plan. A copy of this ordinance is presented in Appendix C.

Protecting Riparian Areas on New Development

Riparian areas shall be protected on new developments in accordance with the Riparian Buffer Rule (15A NCAC 2B .0233). The Riparian Buffer Rule requires that 50-foot riparian buffers be maintained on all sides of intermittent and perennial streams, ponds, lakes and estuaries in the Neuse River basin. The rule includes some uses that are allowable within the riparian buffer and some that are allowable with mitigation. The table of uses in 15A NCAC 2B .0233(6) lists those uses that are allowable in the riparian buffer and is presented in Appendix D.

No new development shall be allowed within the first 50 feet adjacent to a waterbody that is shown on either the USGS topographic map or the NRCS Soil Survey maps unless the owner can show that the activity has been approved by DEQ. DEQ approval may consist of the following:

- An Authorization Certificate that documents that DEQ has approved an allowable use such as a road crossing or utility line. A detailed list of allowable uses is included in the table of uses in 15A NCAC 2B .0233(6).
- An opinion from DEQ that vested rights have been established for the proposed development activity.
- A letter from DEQ documenting that a variance has been approved for the proposed development activity.
- A letter from DEQ documenting that, based upon a field stream classification inspection, the USGS topographic map and the NRCS soil survey maps are in error and an intermittent and perennial stream, pond, or lake does not exist.

Density and Built Upon Area Standards

Developers must meet other low density, high density and other built upon area (BUA) requirements of DEMLR's 15A NCAC 02H .1003 Stormwater Rule. There are two different low and high density thresholds for the Neuse Stormwater Rule and Water Supply Watershed protection area. The Town of Garner's Water Supply Watershed protection area falls within the Neuse Stormwater area so that area shall be subject to the more stringent density and BUA thresholds. For the purpose of this Neuse Stormwater Rule document, the following focus will be on the twenty-four (24%) percent threshold for development unless the development also is contained within the Water Supply Watershed protection area.

New BUA beyond the above limitations must comply with the stormwater treatment and nutrient requirements. BUA calculations include all proposed lots, portions of lots, planned rights-of-way, and common areas. Prior to the conveyance or transfer of any lot the BUA on that lot shall be referenced on the final plat and shall be recorded with the county Register of

Deeds as the BUA Limitation. The BUA Limitation shall be binding on all subsequent owners of the site and portions of the site.

Existing BUA shall consist of any BUA present before the time of the Rule adoption. Regulated BUA shall refer to any BUA after the Rule adoption and Cumulative BUA shall refer to Regulated BUA plus any new BUA at a development site. This Rule is triggered once any of the site BUA exceeds 24% or if the site meets the disturbance thresholds listed within this plan. Regulated and cumulative BUA shall be calculated based on the entire site minus existing BUA and if a site exceeds 24% BUA, then a stormwater control measure shall be required for treatment of nitrogen.

Low Density

A project shall be considered a low density project if it meets the low density criteria set forth in Rule 15A NCAC 02H .1003 and contains no more than twenty four (24%) percent built-upon area (for Neuse Stormwater Rule) or no more than twelve (12%) built upon area within the Water Supply Watershed protection area or no more than two dwelling units per acre; otherwise, a project shall be considered high density. Where high-density stormwater design is not required, stormwater systems shall meet the low-density stormwater design standards set forth in 15A NCAC 02H .1003(2).

High Density

A project shall be considered a high density project if it exceeds the low density thresholds and has greater than twenty-four (24%) percent BUA for the Neuse Stormwater Rule or greater than twelve (12%) percent BUA within the Water Supply Watershed protection area. Where high-density stormwater design is required, stormwater systems shall meet the standards set forth in 15A NCAC 02H .1003(3) and be designed to control and treat the volume of runoff generated from all built-upon area by one inch of rainfall or equivalent runoff volume in one or more Primary SCMs. These projects may utilize offsite Primary SCMs dedicated to treating an area encompassing the project

Existing Built Upon Area

Existing built upon area (BUA) is used within this document to define existing and preexisting development within these Rules. The BUA statue (Ch. 143-214.7) effectively exempts such developments from stormwater control requirements. Determination of Existing BUA status will be tied to the date of the most recent amendment of the Rule. That is, when the Rule is amended, the "BUA clock" is set or reset based on the effective date of the applicable local ordinance implementing the Rule. Whatever BUA is present at that time becomes "Existing BUA".

Regulated Built Upon Area

Regulated BUA will refer to all BUA in existence at the time of a development application that was installed after the Rule went into effect through local ordinance, that was not vested at that time and thus is subject to consideration under the Rule. Regulated BUA will have stormwater treatment already provided, will have been addressed by nutrient offsets, or will have been part of a development that did not exceed the Rule's nutrient loading rate targets or 24% (twenty-four) threshold.

Cumulative Built Upon Area

Cumulative BUA refers to all Regulated BUA plus any proposed net increase in BUA on a project site at the time of a development application. All cumulative BUA is subject to consideration under the Rule and it excludes all "Existing BUA."

Calculating N Export from New Development

For the purposes of the Neuse Stormwater Management Plan, new development shall be defined as to include the following:

- Developers provide onsite stormwater treatment for all cumulative BUA if the project density > 24% BUA, and meet other low-density, high-density and other stormwater requirements of DEMLR's 02H .1003.
- Developers shall use an averaging method to determine a conservative BUA at final build out for single family lots based on dwelling units per acre and land cover proportions. The following table includes final build out lot estimate requirements for lots within residential subdivision as well as multifamily and commercial developments. Stormwater calculations will have to be completed for the entire subdivision final build out, which not only should include an estimate for lots, but also open space, amenity center(s), playgrounds, roads, sidewalks, trails etc.:

Туре	BUA Calculation	Stormwater Requirement
Less than or equal to R4 Single Family	Built Upon Area (BUA) is calculated for the overall subdivision, with BUA on individual residential lots estimated at 35% impervious area	Subdivision-level stormwater control required; 24% BUA or greater for the overall subdivision requires installation of stormwater control measure(s)
R8 Single Family	Built Upon Area (BUA) is calculated for the overall subdivision, with BUA on individual residential lots estimated at 45% impervious area	Subdivision-level stormwater control required; 24% BUA or greater for the overall subdivision requires installation of stormwater control measure(s)
Multifamily	Built Upon Area (BUA) is calculated for the development with calculated known impervious surface area	24% BUA or greater for the development requires installation of stormwater control measure(s)
Commercial	Built Upon Area (BUA) is calculated for the development with calculated known impervious surface area	24% BUA or greater for the development requires installation of stormwater control measure(s)

- The project shall meet either a nitrogen stormwater loading rate target of 3.6 pounds per acre per year (lb/ac/yr) or meet "runoff volume match" as defined in 15A NCAC 02H .1002.
- The project area used for nutrient calculation and stormwater requirements includes the site area less any existing built-upon area. The project density used for determining stormwater requirements is the amount of built-upon area subject to this ordinance at project completion divided by the project area.
- The developer shall determine the nitrogen load and loading rate generated from the project area without engineered stormwater controls and determine the needed nitrogen load reduction to meet nutrient targets by using the approved accounting tool.
- Stricter onsite treatment requirements will apply within the Town of Garner if the development area is within the Water Supply Watershed area.

- Dedicated offsite regional SCMs may be used for stormwater treatment covering multiple otherwise unrelated projects
- Projects meeting the definition of "runoff volume match" do not need to further address nutrient export
- New development shall NOT include agriculture, mining or forestry activities. Land disturbance is defined as grubbing, stump removal and/or grading of existing pervious areas.

Methods to Meet Nutrient Control Requirements

Projects subject to this ordinance shall meet nitrogen loading targets through a combination of the following methods:

- Projects may reduce export of nitrogen through any combination of engineered stormwater controls treating runoff on the site, in an approved offsite regional engineered stormwater control, or through the acquisition of permanent nutrient offset credits. The developer shall calculate the nitrogen reduction provided by these controls using the approved accounting tool.
- Proposed development undertaken by a local government solely as a public road expansion or public sidewalk project, or proposed development subject to the jurisdiction of the Surface Transportation Board, may meet nitrogen reduction needs for the project entirely through the use of permanent nutrient offset credits pursuant to the Nutrient Offset Credit Trading Rule, 15A NCAC 02B .0703.

Use of Permanent Nutrient Offset Credits

Sufficient permanent nutrient offset credits to meet project nutrient reduction needs not provided by engineered stormwater controls serving the project shall be acquired prior to approval of the development plan. The Stormwater Administrator shall issue an approval letter for the development that documents the needed nitrogen credits in pounds per year and where the development is located relative to the Town of Garner Rules' geographic requirements. All permanent nutrient offset credits permitted by this ordinance shall meet the requirements of 15A NCAC 02B .0703.

Permanent nutrient offset credits shall be acquired pursuant to N.C.G.S. 143-214.26 and 15A NCAC 02B .0703 prior to the start of construction of the project.

A developer subject to this ordinance may acquire permanent nutrient offset credits through one of the following methods:

- (1) Through a private nutrient bank.
- (2) Through payment into the Riparian Buffer Restoration Fund established in N.C.G.S. 143-214.21.

Excess permanent nutrient offset credits acquired beyond what is required for the development may not be applied to any other development.

The nitrogen export from each new development must be calculated. This export will be calculated in pounds per acre per year (lbs/ac/yr). Nutrient loading rate reductions resulting from the use of SCMs shall be determined through the use of the tool most recently approved by the Division to have met the following criteria, or through an alternative method that meets or exceeds the following criteria, as determined by the Division:

- Provides project site loading reduction estimates from the installation of Department of Energy, Mineral and Land Resources (DEMLR) approved SCMs;
- Reductions apply to the portion of the project's runoff volume that is directed to the SCMs;
- The method partitions the runoff volume processed by the SCM among hydrologic fates and assigns nutrient concentrations to each of those fates; and
- The method is supported by the weight of evidence from available, current, and applicable research.

Calculating Peak Runoff Volume

The Town of Garner requires peak flow reduction for the 1-year, 10-year and 25-year storm and sometimes the 100-year storm. Design of any detention devices required to reduce post development peak flow shall use the design method contained in <u>Elements of Urban Stormwater Design</u> (Malcolm) or any current applicable method that is approved by the Engineering Department.

The peak flow control requirement is not required for developments that meet any of the following conditions:

- The increase in peak flow between pre- and post-development conditions does not exceed ten percent (note that this exemption makes it easier to conduct redevelopment activities).
- The proposed new development meets all of the following criteria: overall impervious surface is less than fifteen percent, and the remaining pervious portions of the site are utilized to the maximum extent practical to convey and control the stormwater runoff.
- It can be demonstrated that detention will <u>increase</u> local flooding problems downstream. In addition, detention for the 10-year and 25-year storm will not be required when it can be demonstrated that the increase in total peak flow at local flood prone areas downstream will increase only an insignificant (less than 2.0 percent) amount.

SCMs for Reducing Nitrogen

Developers shall utilize any stormwater control measure that has been approved by NCDEQ. There are many approved options for SCMs that reduce nitrogen from new development. SCMs shall be designed to meet the most recent and relevant Minimum Design Criteria (MDC) set forth in the Rules by the NCDEQ. Underground proprietary systems may be used if they have approved by NCDEQ. All SCMs require regular maintenance, and some have varying performance depending on soil type and the season. It is crucial to consider the issues of aesthetics, long-term maintenance, safety and reliability in SCM design.

Exemptions from the Neuse Stormwater Rule

Development or expansion of existing development as defined in 15A NCAC 02H .1002 is exempt from the provisions of this Neuse Stormwater Rule.

Development or expansion of development for which the permit application was submitted prior to adoption of this ordinance is optionally exempt from the provisions of this ordinance per the requirements of N.C.G.S. 143-214.7(a1)(2).

Projects that require a state permit, such as landfills, NPDES wastewater discharges, land application of residuals and road construction activities shall be considered to have vested rights if a state permit was issued prior to March 9, 2001.

Post-Construction Stormwater Site Runoff Controls

Requirements in the Rule

The Town of Garner will ensure proper legal authorities are in place to require compliance with the Neuse Stormwater Rule throughout the entire jurisdiction, including applicability, nutrient targets, nutrient offset procedures, and stormwater requirements; specify development plan submission requirements; review and approve development plans and SCM Operation and Maintenance plans and agreements; conduct inspections and enforcement; require that SCMs are designed to State Minimum Design Criteria (or a more stringent standard); require annual inspection of SCM inspection reports by qualified professionals; require restoration of malfunctioning SCMs to a functional state by responsible parties; and prevent incremental addition of BUA beyond what each development or its SCM(s) were permitted or designed to be developed.

Development plans, including expansions, will be reviewed for stormwater compliance with the Neuse Riparian Buffers, water supply watershed protection rules, the Neuse Stormwater Rule and NPDES Phase II permit regulations. This includes adequacy of nutrient calculations, SCM design, Operations and Maintenance Agreements, public access and maintenance easements for SCMs as well as any other federal, state or local government rules.

All development plans, including expansions, that meet the threshold for disturbance for the Neuse Stormwater Rule or water supply watershed rules, shall be tracked on an annual basis and reported to the State. Post-construction SCMs are tracked for annual inspections and maintenance, enforcement actions and/or maintenance required on the SCMs. Development activity over the past year is tracked and reported annually, including the number of Nutrient Management Strategy (NMS)-subject plans approved, inspections performed for plan compliance, and construction-stage enforcement actions for NMS-subject developments. ("NMS-subject plans/developments" means those that meet disturbance or other nutrient management thresholds.) Annual reporting includes all nutrient tool calculation inputs used to determine nutrient loads from developments approved in the past year and reductions provided by proposed SCMs.

SCM Operations and Maintenance

The maintenance of any SCM installed to achieve nitrogen loading and/or flow attenuation requirements for a development shall be the responsibility of the property owner or other identified responsible party. In the case of residential or commercial subdivisions Homeowners Association or other applicable responsible party.

Operation and Maintenance Agreement

There shall be an Operation and Maintenance Agreement (O&M Agreement) and Memorandum of Agreement for every engineered stormwater control. The O&M Agreement shall specify all operation and maintenance work necessary for the function of all engineered stormwater control components within the system. The O&M Agreement shall require the owner to maintain, repair and, if necessary, reconstruct the engineered stormwater controls, and shall state the terms, conditions, and schedule of maintenance for the engineered stormwater controls. The O&M Agreement shall specify methods to be used to maintain or restore the engineered stormwater controls to design specifications in the event of failure. The O&M Agreement shall require the applicant or owner to maintain, repair, or reconstruct the engineered stormwater controls in accordance with the approved design plans. The O&M Agreement shall be binding on all subsequent owners of the site, portions of the site, and lots, or parcels served by the engineered stormwater control. Until the transference of all property, sites, or lots served by the engineered stormwater control, the original owner or applicant shall have primary responsibility for carrying out the provisions of the O&M Agreement.

The O&M Agreement must be approved by the Stormwater Administrator prior to development plan approval, and it shall be referenced either at time of Certificate of Occupancy for commercial development or during construction drawing review for residential subdivisions and shall be recorded with Wake County Register of Deeds along with a Memorandum of Agreement. A copy of the recorded Memorandum of Agreement plus O&M Agreement shall be given to the Stormwater Administrator within fourteen (14) days following its recordation.

A 20 foot public stormwater access and maintenance easement around all SCMs shall be recorded on the plat for each new development to grant to the Town of Garner a right of entry to the property to inspect, monitor, maintain, repair, or reconstruct the engineered stormwater control; however, in no case shall the right of entry, of itself, confer an obligation on Town of Garner to assume responsibility for the engineered stormwater controls.

SCM Inspection Program

The Town of Garner Engineering Department Staff have previously conducted annual inspections on all privately and publicly owned SCMs with the adoption of the Neuse Nutrient Management Strategy from 2001 through 2022., As of July 1, 2022, Private Property owners are now responsible for submitting a certified annual inspection and maintenance document by a qualified professional to the Town. The Town shall provide a sample inspection and certification document with SCM checklists for use that is to be submitted on an annual basis within the reporting year that begins July 1 and ends June 30. These inspections begin once a development site as-built drawings have been reviewed, approved and accepted by the Town. Inspections will then continue on an annual basis. Private property owners are to submit annual inspection records and SCM certifications or any maintenance that is needed with a maintenance plan for that maintenance. All inspections are to be conducted by a qualified professional and results submitted on the Town of Garner Annual Stormwater Control Measure Inspection Report document to the Town for review and approval. Inspection reports are documented electronically by the Town of Garner and photographs are kept as record. Town of Garner Engineering

Department staff will continue to inspect all Town owned and maintained SCMs on an annual basis as well as 20% of privately owned SCMs as required by the NPDES Phase II MS4 permit. The property owner/responsible party shall have ninety (90) days to correct all deficiencies and make all repairs to the satisfaction of the Town Engineer. Failure to provide a certification letter that the SCM is functioning as originally designed or failure to satisfactorily complete the required repairs within the 90 days shall be constitute that the SCM is operating improperly and will cause the SCM to be in violation of Section 11.2 of the UDO and will be subject to enforcement actions described in Section 7.6 of the UDO. Any complaints received for an unmaintained SCM as well as deficiencies found by Engineering Department staff for the SCM without required maintenance shall also be subject to enforcement actions as described in Section 7.6 of the UDO.

If the owner or occupant of any property refuses to permit such inspection, the Stormwater Administrator shall proceed to obtain an administrative search warrant pursuant to N.C.G.S. 15-27.2 or its successor. No person shall obstruct, hamper or interfere with the Stormwater Administrator while carrying out his or her official duties.

Performance Security Measures

The Town of Garner may, at its discretion, require the submittal of a performance security or bond with surety, cash escrow, letter of credit or other acceptable legal arrangement prior to issuance of a permit in order to ensure that the engineered stormwater controls are installed by the permit holder as required by the approved stormwater management plan, and/or maintained by the owner as required by the Operation and Maintenance Agreement.

Development Closeout Process

At project close out and/or Certificate of Occupancy, all stormwater as-builts for stormwater control measures (SCMs) and public storm drain infrastructure will be reviewed and approved by the Town of Garner Engineering Department. Upon acceptance of these structures and controls by the Town of Garner, SCMs will then be the responsibility of the property owner to maintain, and they will be inspected annually by Town Engineering Department staff. Any maintenance items will be reported to the property owner and measures will be taken as described earlier in this Plan in the SCM Inspections Program section.

6. Illicit Discharge Detection and Elimination

Requirements in the Rule

The Town of Garner has a program to prevent, identify and remove illicit/illegal discharges as required by the Neuse Stormwater Rule and MS4 NPDES Phase II permit. Illicit/Illegal discharges are flows in the stormwater collection system that are not associated with stormwater runoff or an allowable discharge. Allowable discharges are shown below in Table 7a. Discharges that are not allowed are shown in Table 7b.

Table 7a: Discharges that may be allowable to the stormwater collection system

Waterline Flushing	Landscape Irrigation	Diverted Stream Flows
Uncontaminated Rising Ground Water	Uncontaminated Ground Water Infiltration to stormwater collection system	Uncontaminated Pumped Ground Water
Discharges from potable water sources	Foundation Drains	Uncontaminated Air Conditioning Condensation
Irrigation Water	Springs	Water from Crawl Space Pumps
Footing Drains	Lawn Watering	Non-commercial Car Washing
Flows from Riparian Habitats and Wetlands	NPDES permitted discharges	Street wash water
Fire Fighting Emergency Activities	Wash Water from the Cleaning of Buildings	Dechlorinated backwash and draining associated with swimming pools

Table 3b: Types of Discharges that are not allowed to stormwater collection system

Dumping of oil, anti-freeze, paint, cleaning fluids	Commercial Car Wash	Industrial Discharges
Contaminated Foundation Drains	Cooling water unless no chemicals added and has NPDES permit	Wash waters from commercial / Industrial activities
Sanitary Sewer Discharges	Septic Tank Discharges	Washing Machine Discharges
Chlorinated backwash and draining associated with swimming pools		

The legal authority for identifying, prohibiting, and removal of discharges not allowed to the stormwater collection system is contained in Chapter 17, Article VI of the Garner Town Code and is presented in Appendix E of this document.

Measurable Goals for Illicit Discharge and Elimination BMPs

Town of Garner will develop, manage, implement, document, report and enforce an Illicit Discharge Detection and Elimination Program which shall include the following BMPs:

- The Town of Garner shall maintain and update a GIS map that includes all major outfalls, receiving streams, drainage pipes and catch basins and all other infrastructure. The Town shall also maintain and update a GIS map with all current land uses within the Local Program jurisdictional area.
- The Town of Garner shall prepare paper maps from the above GIS map for use by staff to conduct field dry weather screening to be able to identify discharges, tracing and any cross-connections.
- The Town of Garner will maintain legal authority to prohibit, detect, investigate, and eliminate illicit discharges and connections, illegal dumping and spills into the storm drain collection system or waters of the state. The enforcement action process along with remedies to deal with cases of non-compliance are contained in Chapter 17, Article VI of the Garner Town Code and are presented in Appendix E of this document.
- The Town shall maintain a list of procedures and data collection for notifying property owners of discharge and violation, advising on corrective actions for discharge and process for escalation of enforcement.
- Town of Garner Engineering Department staff shall conduct dry weather screening based upon the criteria listed below within the Mapping and Field Screening section of this document.
- A proactive discharge and screening program shall be developed to identify hot spots in town based on discharges and source types from previous data.
- Municipal staff shall train employees on illicit discharge detection and elimination within departments of town who are most likely to detect illicit discharges during their day-to-day job functions. Public Works employees shall be trained annually on illicit discharge detection and elimination along with Good Housekeeping and Pollution Prevention as required by the Town's MS4 permit. This training includes detecting discharges, cross connections as well as illegal dumping and provides basic outreach materials as well as contact information to report any IDDE incidents.
- The Town shall maintain a tracking system for all observed IDDE incidents and results of
 investigations, cleanup actions, enforcement actions, chronic violators and when the
 incidents were closed. All incidents whether reported as reactive, through a proactive
 program, reported by trained employees or reported on the stormwater hotline or email
 shall be tracked in this database.
- The Town shall perform a yearly evaluation of the IDDE program to promote a sustainable and effective program. Any changes to the program shall be reported within the annual report. The annual report shall also include both reactive program and field screening summaries.

Collecting Jurisdiction-Wide Information

The Town of Garner has collected and mapped the jurisdictional area's stream and waterbody network as well as the entire storm drainage network and kept updated to enable detection and field tracing of all illicit discharges, connections and/or dumping. Garner has compiled maps that show the information presented below. This information can be found on the Town's GIS system and, as such, can be displayed on one single map.

- Location of sanitary sewers in areas of the major stormwater collection systems and the location of areas that are not served by sanitary sewers.
- Waters that appear on the USDA B Natural Resources Conservation Service Soil Survey Maps and the U.S. Geological Survey 1:24,000 scale topographic maps.
- Existing land uses. Categories to be presented are: undeveloped, residential, commercial, agriculture, industrial, institutional, and publicly owned open space.
- Currently operating and known closed municipal landfills and other treatment, storage, and disposal facilities, including for hazardous materials.
- Major stormwater structural controls.
- Known NPDES permitted discharges to the stormwater collection system.

Mapping and Field Screening in High Priority Areas

Garner has identified eight (8) high priority areas of its jurisdiction for more detailed mapping and field screening. These high priority areas are comprised of at least ten percent of the corporate limits and ETJ. Currently Garner's planning jurisdiction is just over 35 square miles in area. One high priority area is conducted per year and all new development from that specific area is incorporated into each year's screening. In order to promote an orderly and systematic field screening program it is not recommended that field screening be conducted all over the jurisdiction at the same time. Accordingly, each year's screening program will try to concentrate on specific drainage basins. New development information is added into each high priority area accordingly and re-evaluated for any illicit discharges or connections.

The first part of the screening process for the selected high priority area is to map the stormwater system. The map that is produced has the following:

- Locations of the outfalls of any pipes from non-industrial areas that are greater than or equal to 36 inches.
- Locations of the outfalls of any pipes from industrial areas that are greater than or equal to 12 inches.

- Locations of drainage ditches that drain more than 50 acres of non-industrial lands.
- Locations of drainage ditches that drain more than 2 acres of industrial land.
- An accompanying summary table listing the outfalls that meet the above criteria that includes outfall ID numbers, location, primary and supplemental classification of receiving water, and use-support of receiving water.

The second part of the screening process for the selected high priority area is conducting a dry weather field screening of all outfalls that meet the above criteria to detect illegal discharges. The dry weather field screening will not be conducted during or within 72 hours following a rain event of 0.1 inches or greater. In addition, in residential areas field screening will be conducted prior to 9:00 AM or after 5:00 PM during Monday through Friday or on weekend days. It is during these time periods when residents are most likely to be home and thus any illicit/illegal discharges are more likely to be evident. Figure 7a illustrates the process that will be used for conducting field screening sampling activities and following up with any findings of dry weather flow. As shown in the figure, if the field screening shows that an outfall is dry, then the outfall will be checked for intermittent flow at a later date.

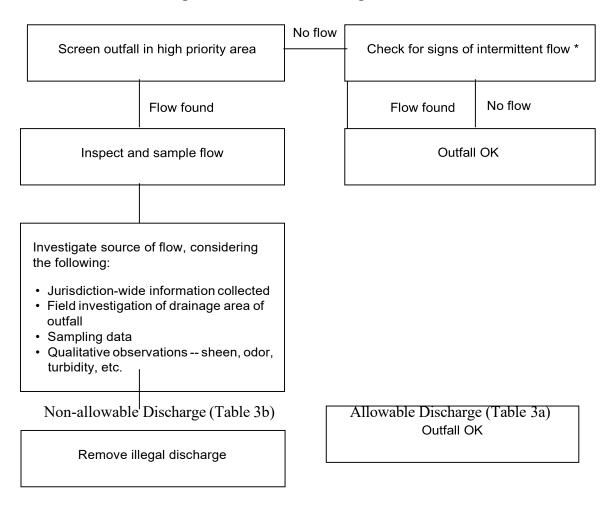
If the field screening shows that an outfall has a dry weather flow that is not allowable (see Table 7b), then a screening report for the outfall will be completed. A screening report form has been developed to allow the information presented in Table 7c to be recorded. Screening reports, along with the associated documentation described in the following section, will be kept on file in hard copy as well as electronic.

Table 7c: Field Screening Report Information

General Information	Sheet Number Outfall ID Number Date Time Date, Time and Quantity of Last Rainfall Event	
Field Site Description	Location Type of Outfall Dominant Watershed Land Use(s)	
Visual Observations	Photograph Odor Color Clarity Floatables	Deposits/Stains Vegetation Condition Structural Condition Biological Flow Estimation
Sampling Analysis *	Temperature pH Nitrogen-Ammonia	Nitrogen-Nitrate/Nitrite Fluoride or Chlorine

^{*} Analytical monitoring is required only if an obvious source of the dry weather flow cannot be determined through an investigation of the upstream stormwater collection system.

Figure 7a: Field Screening Process



^{*} Checking for intermittent flow includes rechecking outfall at a later date as well as visual observations for evidence of intermittent flow.

Note: Analytical monitoring is required only if an obvious source of the dry weather flow cannot be determined through an investigation of the upstream stormwater collection system.

The purpose of the field screening is to provide clues as to the source of the illicit/illegal discharge. The characterization will be used in conjunction with the jurisdiction-wide information and a field investigation to identify the source of the illegal discharge. The process of identifying and removing illegal discharges is discussed in the next section.

Identifying and Removing Illicit Discharges

After the field screening is complete, appropriate measures will be taken to identify and remove illegal discharges. Identifying illegal discharges may require a combination of office and field work. After the field screening has identified that an illegal discharge may be occurring the jurisdiction-wide information will be reviewed to help identify potential sources of the discharge. After potential sources have been identified a systematic field investigation will be undertaken to try to identify the actual source of the illegal discharge. Several field methods which may be used to identify illegal discharges are as follows:

- Site Investigation
- Additional Chemical Analysis (recommend testing for fecal coliform if the ammonia concentration was found to exceed 1.0 mg/L)
- Flow Monitoring (recommended to use multiple site visits rather than a depth indicator)
- Dye Testing (fluorescent dye is recommended)
- Documentation of the results of the office and field investigations will be kept on file with the screening report.

Once the source of an illegal discharge is identified, enforcement action will be undertaken to have the source removed. The enforcement action process along with remedies to deal with cases of non-compliance are contained in Chapter 17, Article VI of the Garner Town Code and are presented in Appendix F of this document. Records of all compliance action will be kept with the screening report.

In addition to maintaining all screening reports on file the screening reports will be used to develop and maintain a map that includes the following information.

- Points of identified illegal discharges.
- Watershed boundaries of the outfalls where illegal discharges have been identified.
- An accompanying table that summarizes the illegal discharges that have been identified that includes location, a description of pollutant(s) identified, and removal status.

Preventing Discharges and Establishing a Hotline

In an effort to aid with the prevention and removal of illegal discharges the Town will contact businesses within the Town that, by the nature of their operation, have the potential to be a likely source of illegal discharges. A listing of the types of businesses that will be contacted along with a sample notification that may be used to inform owners and operators about the requirements of the illegal discharge program is presented in Appendix F.

The Neuse Stormwater Rules also requires the Town to establish a hotline for reporting suspected illegal discharges. Currently, all callers phone in to an answering machine with a prerecorded message that provides them with instructions. If the illegal discharge is perceived to be an emergency the caller will be instructed to call the general Town Hall phone number during regular business hours or the existing Public Works emergency number after business hours and on weekends. Any call received during normal business hours should be answered or returned by the Stormwater Program Administrator in a timely manner and incident should be investigated as soon as possible.

An email account has also been created to report illicit discharges and illegal dumping for citizens to report that gets routed directly to the Stormwater Program Administrator. The Town of Garner has a phone application that also has an option to report any illicit discharge or illegal dumping that also gets assigned directly to the Stormwater Program Administrator.

7. Public Education

Requirements in the Rule

The Neuse Stormwater Rule requires that a Public Education and Outreach Action Plan be developed and administered as a part of Garner's plan. The purpose of this education program is to address nitrogen loading issue as well as a list of target pollutants, likely sources, target audiences, and outreach methods. This plan will be reviewed against illicit discharge incidents and public education from past years and updated accordingly.

Website, Hotline and Email Address

The Town of Garner shall maintain an up-to-date website for stormwater information that is applicable to the Neuse Stormwater Program, contacts and resources for the stormwater program for both developers and citizens. The Town will also maintain a stormwater email and hotline for citizens to inquire about stormwater, report illicit discharges or any other issue pertaining to stormwater. The hotline and email will be monitored and documented as calls/emails are reported.

Public Education Partnerships

The Town of Garner shall maintain an education partnership with the Clean Water Education Partnership (CWEP) that is run through Triangle J Council of Governments. CWEP shall provide mass media education as well as public involvement activities in Garner's community as opportunities arise. An MOA currently exists between CWEP and the Town of Garner to provide education and outreach services. This agreement includes what outreach CWEP will perform and data that CWEP collects to report back to the local government and state. This MOA can be found in the Appendix B.

Public Service Announcements

The Town of Garner Stormwater Program Administrator shall work with the Communications Specialist periodically to produce stormwater public service announcements (PSAs) that will run on Garner's local cable channel as well as Garner's social media accounts. These PSAs will be based on targeted pollutants.

8. Reporting Requirements

An annual Neuse Stormwater Program report based on the information collected from July 1 through June 30 of each year is required to be submitted to the Division of Water Resources by October 30 of each year. This report will consist of two parts. Part 1 will consist of reporting implementation metrics for the BMPs mentioned in this document and tasks in the approved local program. Part 2 shall be submitting raw data input from the most recent tool approved by the State for nitrogen calculations tool as a text file.

New Development Review/Approval

A summary of the new development that has occurred in the previous year will be submitted as part of the annual report. The information on new development to be reported is presented below:

- Acres of new development and impervious surface based on plan approvals.
- Summary of Plans Approved for New Development and Redevelopment during the reporting year.
- Summary of SCMs implemented and use of offset fees.
- Summary of results from jurisdictional review of planning issues.

Illicit Discharge Detection and Elimination

All illicit discharges will be reported as part of the proactive and reactive programs as well as any discharges reported by staff, through the hotline, email address or Garner phone application for the reporting year. This will include type of discharge, what was found during inspection and if it was remedied. All dry weather field screening results shall also be reported and summarized for the reporting period.

Post Construction Stormwater Site Runoff Control

The report will summarize:

- Summary of number of SCM inspections.
- Summary of maintenance activities conducted on SCMs.
- Summary of any SCM failures and how they were handled.

Public Education

The Report will summarize the next years Action Plan and evaluate the implementation of the previous year's Action Plan (if applicable). It will also include all the Public Education that was performed during the reporting year. This shall also include any updates proposed to the Clean Water Education Partnership (CWEP) MOA during or for the upcoming reporting year.

APPENDIX A

Wake County and Town of Garner Interlocal Agreement for Sediment and Erosion Control

STATE OF NORTH CAROLINA COUNTY OF WAKE

INTERLOCAL AGREEMENT BETWEEN THE TOWN OF GARNER AND WAKE COUNTY REGARDING ADMINISTRATION OF EROSION AND SEDIMENTATION CONTROL ORDINANCE

This Interlocal Agreement (the "Agreement"), entered into this the 3 day of 2018, by and between the TOWN OF GARNER, NORTH CAROLINA, being a municipal corporation organized under the laws of North Carolina (hereinafter "Garner") and WAKE COUNTY, NORTH CAROLINA, a public body politic and corporate of the State of North Carolina (hereinafter "Wake"); collectively referred to herein as "the Parties",

WITNESSETH:

WHEREAS, construction site runoff controls are a minimum measure required by Garner's National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Discharge Permit issued by the North Carolina Department of Environment and Natural Resources; and

WHEREAS, the Wake County Erosion and Sedimentation Control Program complies with the construction site runoff controls minimum measure; and

WHEREAS, Wake has long administered for Garner the provisions of Article 10, "Erosion and Sedimentation Control" of the Wake County Unified Development Ordinance ("E&S Ordinance" or "Ordinance") without benefit of a formal interlocal agreement; and

WHEREAS, Wake shall continue to administer in Garner's jurisdiction the E&S Ordinance; and

WHEREAS, the parties pursuant to the authority of Chapter 160A-461 et seq. of the North Carolina General Statutes and proper resolution by the governing body of Garner and the Wake County Board of Commissioners are authorized to enter into this Agreement in order to pursue the above stated goals.

NOW THEREFORE, for and in consideration of the premises and covenants contained in the Agreement and the mutual benefits derived therefrom, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE I Purpose, Roles, & Responsibilities

- **1.01. Purpose:** This Agreement shall define the terms under which Wake shall administer and enforce in Garner's jurisdiction the E&S Ordinance, which is the same Ordinance that is administered and enforced in Wake's jurisdiction.
- **1.02. Roles and Responsibilities of the Parties:** From the "Effective Date" of this Agreement (See Section 3.08)
 - (A) Wake shall:
 - 1. Provide personnel, equipment, space, and resources needed to administer the E&S Ordinance.
 - 2. Administer the E&S Ordinance, including establishing and assigning all duties of Wake employees necessary to administer the Ordinance, and do so in a way that assures a common level of service for Garner and Wake.
 - 3. Collect development and administrative fees from developers applying for erosion and sediment control approval within Garner's jurisdiction. Such fees shall be assessed in accordance with the then current fee schedule adopted by the Wake County Board of Commissioners and shall be retained by Wake to pay for the costs of personnel, equipment, space, and resources needed to administer the Ordinance within Garner's jurisdiction.
 - 4. Assess and collect in its discretion any civil penalties authorized by the Ordinance. Any penalties collected shall be remitted to the N. C. Civil Penalty and Forfeiture Fund in accordance with state law.
 - **5.** Communicate regularly with Garner to foster efficient and effective administrative processes.
 - 6. Develop with Garner a Work Plan that details the standard operating procedures for communication, coordination, and implementation of the erosion and sedimentation control program. The Work Plan shall be reviewed and updated at least bi-annually.
 - 7. Determine if the Ordinance meets the requirements set forth in (B)1 hereunder for the purpose of Wake's continued administration and enforcement of the Ordinance under the terms of this Agreement.
 - (B) Garner shall:
 - So long as administration of this Ordinance by Wake is desired, enact and abide by the Ordinance in its current form, or adopt by reference the Ordinance in its current form and as it may be subsequently amended. Nothing herein shall be construed to divest Garner of the discretion and powers of its governing bodies; rather this provision defines the terms under which Wake's administration of the Ordinance shall be practical and efficient.
 - 2. Consider in accordance with legal process any future amendments necessary to keep the Ordinance up to date for the jurisdiction of Garner. Garner is required to notify Wake's Water Quality Division Director in

- writing of any proposed or approved amendments to the Ordinance specific to Garner as soon as practicable but in no event later than thirty (30) days before the date such item appears on the Garner Town Council's agenda.
- **3.** Communicate regularly with Wake to foster efficient and effective administrative processes.
- 4. Develop with Wake a Work Plan that details the standard operating procedures for communication, coordination, and implementation of the erosion and sedimentation control program. The Work Plan shall be reviewed and updated at least bi-annually.

ARTICLE II Term

- 2.01. The term of this Agreement shall be for a period of ten (10) fiscal years. The first year hereunder shall commence on the date of the last signature hereto and shall run through the end of the then current fiscal year, with successive years hereunder to begin July 1 and end June 30. The agreement will terminate on June 30, 2028 unless renewed by the parties as set forth herein.
- **2.02.** The parties may renew this Agreement for successive periods of ten (10) years by the written consent of both parties executed with the same formality herein.
- 2.03. Appropriations for the purposes established herein shall be established through the normal budget and appropriations processes of Wake. Failure of the governing body to adopt the budget ordinance or any capital project funding related to provision of services hereunder prior to the commencement of a new fiscal year shall result in termination of this Agreement effective for the next fiscal year with no requirement of compliance with the notice provisions of Section 2.04.
- 2.04. In the event that either party in its sole discretion determines that the Garner Ordinance no longer conforms with Section 1.02(B)1, herein, and either party determines that as a result, administration and enforcement of the Garner Ordinance is no longer feasible, then either party may terminate this Agreement within one hundred eighty (180) days by giving notice as prescribed by Section 2.05 hereunder, notwithstanding that the shorter time provision shall apply. At the execution of this Agreement, the parties agree that the Garner Ordinance as written conforms with Section 1.02(B)1. This section shall apply to changes or amendments to the ordinance(s) made after the execution of this Agreement which either party may deem non-conforming.
- **2.05.** Wake and Garner shall each have the right to withdraw from this Agreement in its entirety for any reason upon giving two hundred forty (240) days' notice to the other party in writing and delivered to the other party as follows:

For Wake:

Water Quality Division Director

PO Box 550

Raleigh, NC 27602

For Garner:

Town Engineer 900 7th Avenue

Garner, NC 27529-3796

The roles and responsibilities of each party shall terminate 240 days after notice is given by the withdrawing party in accordance with this Agreement unless otherwise agreed by the written consent of the parties executed with the same formality as the foregoing document.

ARTICLE III Miscellaneous

- **3.01. Governing Law:** The Parties agree that North Carolina law shall govern this Agreement.
- **3.02. Severability:** If any provision of this Agreement shall be determined to be unenforceable by a court of competent jurisdiction, such determination will not affect any other provision of this Agreement.
- **3.03. Entire Agreement, Amendments:** This Agreement constitutes the entire Agreement between the Parties. This Agreement shall not be modified or amended except in a writing signed by all Parties and executed with the same formality as the foregoing document.
- 3.04. Liability of Officers and Agents: No officer, agent, or employee of any Party shall be subject to any personal liability by reason of the execution of this Agreement or any other documents related to the transactions contemplated hereby. Such officers, agents, or employees shall be deemed to execute this Agreement in their official capacities only, and not in their individual capacities. This section shall not relieve any such officer, agent, or employee from the performance of any official duty provided by law.
- **3.05. Counterparts:** This Agreement may be executed in several counterparts, each of which shall be an original. Alternatively, each Party may execute an original of this Agreement and all individually executed originals shall constitute a single Interlocal Agreement.
- **3.06. Assignment:** No Party shall sell, transfer, assign, or subcontract any interest in or obligation under this Agreement without the prior written consent of all of the Parties.

- **3.07. No Creation of Agency:** Wake and Garner agree that nothing herein shall be construed to create an agency relationship between Wake and Garner or to mandate purchase of insurance by Wake pursuant to N.C.G.S. 153A-435; or to waive Wake's defense of governmental immunity from any cause of action alleged or brought against Wake for any reason if otherwise available as a matter of law.
- **3.08. Effective Date of Agreement:** The effective date of this Agreement shall be the date upon which the Wake County Manager executes this agreement and the Wake County Clerk attests to such execution. This date shall be reflected in the first paragraph of this Interlocal Agreement.
- **IN WITNESS WHEREOF,** the parties have caused this Agreement to be executed in their corporate names by their duly authorized officers, all as of the date first above written.

TOWN OF GARNER, NORTH CAROLINA	This instrument is approved as to form and
	legal sufficiency
By: OF Lannes Wine	William I long
Ronnie Williams, Mayor	
	William E. Anderson, Town Attorney
CORPORAL TO E	
ADTEST: [SEAL]	
1. 19.5 Beech	
1 All MA	
By: TULKE / OLUGOV	
Stella Gibson, Town Clerk	
WAKE COUNTY, NORTH CAROLINA	This instrument is approved as to form and
	legal sufficiency.
By: Mary WS	xalassivissean of he hawan
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David Ellis, County Manager	Scott Warren, County Attorney
[
Tell Jack	
ATTEST: [SEAL] \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
0 . 11	
By: Verise Hagan	THE CLEONING
	60666333493396888888
Denise Hogan, Count Clerk	

Article 10 Erosion and Sedimentation Control Summary of Proposed Revisions 06.12.18

1. Section 10-10 Jurisdiction

o 10-10-3 Added last sentence: "Whenever conflict exists between federal, state or local laws, ordinances or rules, the more restrictive provision shall apply".

2. Section 10-12 Definitions

- Added definitions per State Model Ordinance: Act, Commission, Department, Larger
 Common Plan of Development or Sale, Plan, and Undertaken.
- Modified definitions to update/clarify: Director of NC DEMLR, NC Sedimentation Pollution Control Act and Track.
- 3. 10-13-2(A) Agricultural Activities made language consistent w/recent changes to NC SPCA.
- 4. 10-13-2(B) Forestland Activities updated agency name, struck: "to the activity on the tract." from last sentence. Revised section to clarify that timbering toward development is not exempt from the requirements of Article 10 and that the N.C. Division of Forest Resources is the agency that determines if land disturbing activities undertaken on forestland are conducted in accordance with Forest Practice Guidelines Related to Water Quality.
- 5. 10-20-5 added comma after "aggregated".
- 6. 10-20-5(A) (1) revised, added new paragraph (2) to clarify permit requirements for builders or entities building on individual lots (contiguous or not) with a cumulative disturbance of greater than an acre, also added ..."if part of a larger common plan of development or sale.", (3) added language from original paragraph (1) to create paragraph (3) and added "maintain"; and (4) renumbered last paragraph, added, "the person conducting the land disturbing activity", changed 15 and 21 days to 14 and struck unnecessary words.
- 7. 10-20-5 (1) 10-20-5(B) (1) added: "and maintain" to second sentence.
- 8. 10-20-6 (A) Revised wording.
- 9. 10-20-9 (B) Referenced stabilization timeframes and added table below paragraph.
- 10. 10-20-10 (A) Updated agency name.
- 11. 10-20-10 (E) Ground Cover changed to 7 days.
- 12. 10-20-11 Added standards specifics to Falls Lake Watershed (15A NCAC 04B. 0132), renumbered section that follows to 10-20-12 Standards for Landfills.
- 13. 10-22-2 and (B)(2) Updated agency name.
- 14. 10-22-3 (A) (2) (e) Updated agency name.
- 15. 10-30-2(B) (2) (a) Changed "his authorized agent" to "their Attorney in Fact", changed "designated" to "registered".
- 16. 10-30-3 (A) Updated agency name.
- 17. 10-30-3 (G) Added as last sentence: "Plan approval shall be conditioned upon the applicant's compliance with federal and state water quality laws, regulations and rules".
- 18. 10-30-4(C) (5) Updated agency name.

- 19. 10-30-9(A) Updated section reference.
- 20. 10-30-9(B) Revised to allow for multiple extensions of the land disturbance permit in increments of either one or two years.
- 21. 10-30-9 (C) struck Commentary: The phasing of large and/or complex projects should be considered when it is anticipated that the maximum permit validity period of 4 years (the original permit has a 2 year validity, plus the maximum renewal period of 2 years) may be insufficient to complete all work or in instances where it may be desirable to obtain certificates of completion for phases, rather than one certificate of completion for the entire project.
- 22. 10-31-2(A) (2) Added stabilization requirements per NC General Permit for Construction.
- 23. 10-32-1(D) (1) (2) Updated agency name.
- 24. 10-40-2 Added to end: "...and the land disturbance permit requirements of this article."
- 25. 10-42-4 Appeal of Civil Penalties Made first paragraph (A) Local Appeal, added at end of last sentence: "...in determining whether to uphold, reduce or waive the civil penalty." Added (B) State Remission of Civil Penalties. NCGS, 113A-64.2
- 26. 10-44 Corrected spelling for complete.
- 27. 10-46-1 (B) Struck comma after article at end of paragraph.

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Part 1 General

10-10 Jurisdiction

10-10-1 The erosion and sedimentation control regulations of this article apply to all of unincorporated Wake County with the exception of municipal extraterritorial jurisdictions. The regulations of this article may also apply within the incorporated areas and the extraterritorial jurisdictions of

10-12 Definitions

municipalities upon proper resolution by the governing bodies of the respective municipalities and agreement by the Wake County Board of Commissioners.

- **10-10-2** Notwithstanding the provisions of G.S. 113A-56(a)(4) and Sec. 10-13-2(E) of this ordinance, the Wake County Board of Commissioners hereby declares that all departments and agencies of the County and its contractors and subcontractors must comply with the regulations of this article when they are more restrictive than similar regulations of the North Carolina Sediment Control Commission.
- 10-10-3 The Wake County Department of Environmental Services is responsible for the administration and enforcement of this article, including approval, issuance of permits related to, and enforcement of erosion and sedimentation control plans. Whenever conflict exists between federal, state, or local laws, ordinances, or rules, the more restrictive provision shall apply.

10-11 Purposes

The erosion and sedimentation control regulations of this article are adopted for the purposes of:

- 10-11-1 regulating certain land-disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and
- **10-11-2** establishing procedures through which these purposes can be fulfilled.

10-12 Definitions

Unless the context clearly indicates otherwise, the definitions of this section are to be used only in interpreting and administering the erosion and sedimentation control provisions of this article.

Accelerated Erosion

Any increase over the rate of natural erosion as a result of land-disturbing activity.

Act – the North Carolina Sedimentation Pollution Control Act of 1973 (NCGS Chapter 113A Article 4, as amended) and all rules and regulations orders adopted pursuant to it.

Active Construction

Activities that contribute directly to the building of facilities including land-disturbing activities for roads, parking lots, footings, etc.

Adequate Erosion Control Measure, Structure, or Device

A measure, structure or device that controls the soil material within the land areas under responsible control of the person conducting the land-disturbing activity.

Affiliate

A person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control of another person.

Best Management Practices

Management and structural practices designed to reduce the quantities of pollutants washed by rain and snow melt into nearby waters.

Borrow

Fill material that is required for on-site construction and is obtained from other locations.

Buffer Zone

A strip of land adjacent to a lake or natural watercourse.

10-12 Definitions

Certificate of Completion for Soil Erosion and Sedimentation Control

A certificate issued by the Wake County Department of Environmental Services indicating that the permittee has achieved acceptable stabilization in accordance with the approved plan and has completed all work necessary on the site related to soil erosion, issued according to Sec. 10-31-2.

Certificate of Compliance for Preliminary Soil Erosion and Sedimentation Control

A certificate issued according to Part 3 of this article by the Wake County Department of Environmental Services indicating that the initial erosion control devices shown on the approved plan have been installed and are operating correctly.

Commission

The North Carolina Sedimentation Control Commission.

Completion of Construction or Development

The stage of a project in which no further land-disturbing activity is required on a phase of a project except that which is necessary for establishing a permanent ground cover.

Contiguous

Sharing the same boundary of property.

Department

The North Carolina Department of Environmental Quality or its successor agency.

Director of Environmental Services

The Wake County official charged with administration and enforcement of the sedimentation and erosion control regulations of this article, including the Director's duly authorized agent or delegate.

Director of North Carolina Division of Energy, Minerals and Land Resources of Land Resources

The Director of the North Carolina Division of Energy, Minerals and Lund Resources of the Department of Environmental Quality, including the official's duly authorized agent or delegate.

The Director of the North Carolina Division of Land Resources of the Department of Environment and Natural Resources, including the official's duly authorized agent or delegate.

Discharge Point

The point at which stormwater runoff leaves a tract of land.

Energy Dissipater

A structure or shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

Erosion

The wearing away of land surface by the action of the wind, water, gravity, or any combination thereof.

Erosion and Sedimentation Control Plan

A plan, as required by this article, for the control of erosion and sedimentation during land-disturbing activities.

Ground Cover

Any natural vegetative growth or other approved material that renders the soil surface stable against accelerated erosion.

10-12 Definitions

High Quality Waters

Waters classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to G.S. 150B-14 (c).

High Quality Water (HQW) Zones

Areas in the Coastal Counties that are within 575 feet of High Quality Waters and for the remainder of the state, areas that are within one mile and draining to HQWs.

Lake or Natural Watercourse

Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

Land Disturbance Permit

The approval document allowing land-disturbing activities to be initiated.

Land-Disturbing Activity

Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, or highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

Larger Common Plan of Development or Sale

An area where multiple separate and distinct construction or land disturbing activities will occur under one plan. A plan is any announcement or piece of documentation (including, but not limited to a sign, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, subdivision application or computer design) or physical demarcation (including, but not limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.

Local Government

Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns and cities, acting through a joint program pursuant to the provisions of the North Carolina Sedimentation Pollution Control Act.

Natural Erosion

The wearing away of the earth's surface by water, wind, or another natural agent under natural environmental conditions undisturbed by humans.

North Carolina Sedimentation Pollution Control Act

The North Carolina Sedimentation Pollution Control Act of 1973 (NCGS Chapter 113A Article 4, as amended) and all rules and orders adopted pursuant to it, also referred to as the Act.

Parent

An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

Person

Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, or other legal entity.

Person Conducting Land-Disturbing Activity

Any person who meets any of the following criteria:

(a) a developer or other person who has or holds himself out as having financial or operational control over a land-disturbing activity; or

10-12 Definitions

- (b) a landowner or person in possession or control of the land that directly or indirectly allows land-disturbing activity or has benefited from it; or
- (c) a contractor or subcontractor who is authorized to perform land-disturbing work for the landowner.

Phase of Grading

One of two types of grading: rough or fine.

Plan

An erosion and sedimentation control plan.

Sediment

Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

Sedimentation

The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land-disturbing activity or into a lake, natural watercourse or on other property.

Siltation

Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land-disturbing activity; and which has been deposited, or is in suspension in water.

Spoils

Refuse material removed from an excavation.

Stabilization

The process of restoring a site with ground cover as defined by this article, which renders the soil stable against accelerated erosion.

Stop Work Order

A written order to stop work, issued by the Director of Environmental Services, upon determining that work is being conducted in violation of this ordinance.

Storm Drainage Facilities

The system of inlets, conduits, channels, ditches, and appurtenances which serve to collect and convey stormwater through and from a given drainage area.

Stormwater Runoff

The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

Subsidiary

An affiliate that is, either directly or indirectly through one or more intermediaries, controlled by another person.

Ten-year Storm

A storm with an intensity expected to be equaled or exceeded, on the average, once in ten years, and of a duration that will produce the maximum peak rate of stormwater runoff for the watershed of interest under average antecedent wetness conditions.

10-13 Applicability

Tract

All eontiguous_land and bodies of water being disturbed or to be disturbed as a unit_part of a larger common plan of development or sale.; regardless of ownership.

Twenty-Five Year Storm

A storm with an intensity expected to be equaled or exceeded on the average, once in 25 years, and of a duration that will produce the maximum peak rate of stormwater runoff for the watershed of interest under average antecedent wetness conditions.

Uncovered

The removal of ground cover from, on, or above the soil surface.

Undertaken

The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

Velocity

The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel is the area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not to be included for the purpose of computing velocity of flow.

Wake County Department of Environmental Services

The Wake County Department of Environmental Services or successor agencies.

Wake County Soil Erosion and Sedimentation Control Checklist

A form containing the list of items required in order for an erosion and sedimentation control plan to be considered complete for review, as provided by the Wake County Department of Environmental Services.

Waste

Surplus materials resulting from on-site land-disturbing activities and being disposed of at a location other than the site of the land-disturbing activity.

Working Days

Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land-disturbing activity to be undertaken.

10-13 Applicability

10-13-1 Except for the exemptions noted in Section 10-13-2, the erosion and sedimentation control regulations of this article apply to all land disturbances exceeding one acre in disturbed surface area. For land disturbances of one acre or less of disturbed surface area, refer to Section 10-20-5 of this article for erosion and sedimentation control requirements. This article expressly applies to the following land-disturbing activities:

(A) Access and Haul Roads

Temporary access and haul roads, other than public roads, constructed or used in connection with any land-disturbing activity are considered a part of such activity.

(B) Borrow and Waste Areas

When the person conducting the land-disturbing activity is not the person obtaining borrow and/or disposing of the waste, these areas are considered a separate land-disturbing activity. When the person conducting the land-disturbing activity is also the person conducting the borrow

10-13 Applicability

or waste disposal activity, the borrow or waste area must be considered part of the land-disturbing activity when:

- (1) areas from which borrow is obtained are not regulated by the provisions of the Mining Act of 1971;
- (2) waste areas for surplus materials that are not landfills regulated by the North Carolina Department of Environment and Natural Resources' Division of Waste Management; or
- (3) waste areas for surplus materials that are not landfills regulated by Wake County under its Solid Waste Ordinance.

(C) Utility Construction

Land-disturbing activities connected with utility construction over which the State of North Carolina does not have exclusive regulatory jurisdiction as provided in G.S. 113A-56 are considered part of such activity.

10-13-2 Exemptions

The erosion and sedimentation control regulations of this article do not apply in the following situations:

(A) Agricultural Activities

Land-disturbing activities undertaken on agricultural lands including the production and activities relating or incidental to the production of crops, grains, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agricultures undertaken on agricultural land for the production of plants and animals useful to man, including, but not limited to: undertaken on agricultural lands for the production of plants and animals useful to man, including but not limited to forage and sod crops, grain and feed crops, tobacco, cotton, and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including the breeding and grazing of any or all such animals; bees and apiary products; and fur animals.

- a. Forages and sod crops, grains and feed crops, tobacco, cotton, and peanuts.
- b. Dairy animals and dairy products.
- c. Poultry and poultry products.
- d. Livestock, including beef cattle, llamas, sheep, swine, horses, ponies, mules, and goats.
- e. Bees and apiary products.
- f. Fur producing animals.
- g. Mulch, ornamental plants, and other horticultural products. For purposes of this section, "mulch" means substances composed primarily of plant remains or mixtures of such substances.

(B) Forestland Activities

Land-disturbing activities undertaken on forestland for the production and harvesting of timber and timber products provided:

10-20 Land-Disturbing Activities

(1)-The timber cutting is not an intial step in a development project or part of a larger common plan of development, in which case the timbering shall not occur until after an erosion and sedimentation plan has been approved and permitted in accordance with this article. and

(2) The land disturbing activities undertaken on forestland for the production and harvesting of timber and timber products which are conducted in accordance with best management practices set out in Forest Practice Guidelines Related to Water Quality as adopted by the North Carolina Department of Environmental Quality t and Natural Resources.

(a) The N.C. Division of Forest Resources is the agency that makes the determination whether or not the land disturbing activities on forestland are being conducted in accordance with Forest Practice Guideline Related to Water Quality. If such land-disturbing activity is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this article apply, to the activity on the tract.

(b) If such land-disturbing activities are not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this Article shall apply.

(C) Mining

An activity for which a permit is required under the Mining Act of 1971, Article 7 of Chapter 74 of the General Statues.

(D) Emergency Activities

Activities essential to protect human life during an emergency.

(E) Activities Under State Jurisdiction

Land-disturbing activities over which the state has exclusive regulatory jurisdiction as provided in G.S. 113A-56, including land-disturbing activities that are:

- (1) conducted by the local, state or federal government;
- (2) conducted by persons having the power of eminent domain; or
- (3) funded in whole or in part by the state or federal government.

Sections 10-14 through 10-19 are reserved for future use.

Part 2 Standards

10-20 Land-Disturbing Activities

Land-disturbing activities shall not be undertaken except in accordance with the following standards:

10-20 Land-Disturbing Activities

10-20-1 Minimum Standards

All soil erosion and sedimentation control plans and measures must conform to the minimum applicable standards specified in North Carolina's *Erosion and Sediment Control Planning and Design Manual* and the *Wake County Sedimentation and Erosion Control Plan Review Manual*. Erosion control devices must be installed to prevent any offsite sedimentation for any construction site regardless of the size of the land disturbance.

10-20-2 Buffer Zone

No land-disturbing activity during periods of construction or improvement to land is permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the 25% of the buffer zone nearest the land-disturbing activity.

(A) Projects On, Over or Under Water

A buffer is not required for a land-disturbing activity in connection with the construction of facilities to be located on, over, or under a lake or natural watercourse.

(B) Buffer Measurement

Unless otherwise provided, the width of a buffer zone is measured horizontally from the edge of the water to the nearest edge of the disturbed area, with the 25% of the strip nearer the land-disturbing activity containing natural or artificial means of confining visible siltation.

10-20-3 Operation in Lakes or Natural Watercourses

Land disturbing activity in connection with construction in, on, over, or under a lake of natural watercourse must minimize the extent and duration of disruption of the stream channel. Where relocation of a stream forms an essential part of the proposed activity, the relocation must minimize unnecessary changes in the stream flow characteristics.

10-20-4 Fill Material

Unless a permit from the North Carolina Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material must be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding 12 inches, and any materials which would cause the site to be regulated as a landfill by the State of North Carolina.

10-20-5 Standards for Erosion and Sedimentation Control Devices

(A) Land Disturbances Requiring A Permit (Greater Than One Acre of Disturbed Area)

- Whenever land disturbing activities disturb more than one acre on a tract, an erosion and sedimentation control permit is required.
- (2) Cumulative land disturbances totaling greater than one acre by a builder or other entity in a subdivision require an erosion and sedimentation control permit. In determining the total area of cumulative land disturbances, the land area of individual building lots, whether or not they are contiguous, shall be aggregated, if part of a larger common plan of development or sale.
- (1)(3) The person conducting the land-disturbing activity must install and maintain erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during the development of said tract.

10-20 Land-Disturbing Activities

(2)(4) The person conducting the land-disturbing activity Mmust plant or otherwise provide a permanent ground cover sufficient to restrain erosion after completion of construction or development within 145 working - days or 21 calendar days following completion of construction or development, whichever period is shorter, except as provided in 15A NCAC 4B .0124(e).

(B) Land Disturbances Not Requiring A Permit (One Acre or Less of Disturbed Area)

- (1) Whenever land-disturbing activities disturb one acre or less on a tract, an erosion and sedimentation control permit is not required. However, the person conducting the land disturbing activity must install and maintain erosion and sedimentation control devices and practices that are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during the development of said tract; and
- (2) Must install a gravel pad, 10 foot in width and 30 foot in length or equivalent, at the access point(s) for construction vehicles; and
- (3) Must install silt fences on the low side of the lot prior to the initial footing inspection conducted by the Building Inspections Division
- (4) Areas within 25 feet of the edge of pavement or gravel of the road must be stabilized before issuance of a Certificate of Occupancy
- (5) All uncovered areas that result from land disturbing activities, and are subject to continued and accelerated erosion, and are causing the movement of sediment offsite from the tract, must be provided with a ground cover or other protective measures, structures or devices sufficient to restrain accelerated erosion and control off-site sedimentation.
- (6) The property owner or agent must be given notice of responsibility for compliance at the issuance of a building permit for said land disturbing activity.
- (7) While a permit is not required for land disturbances of one acre or less on a tract, the County retains the right to take enforcement actions and assess penalties if the movement of sediment offsite from the tract is observed during an inspection. Enforcement actions and penalties are described in Part 4 of this article.

10-20-6 Inspection by Landowner

- (A) The landowner, the financially responsible party, or the landowner's or the financially responsible their party's agent must perform an inspection of the area covered by the erosion and sedimentation control plan after each phase of the plan has been completed and after establishment of temporary ground cover in accordance with G.S. 113A-57(2).
- (B) The person who performs the inspection must maintain and make available a record of the inspection at the site of the land-disturbing activity. The record must set out any significant deviation from the approved erosion and sedimentation control plan, identify any measures that may be required to correct the deviation, and document the completion of those measures. The record must be maintained until permanent ground cover has been established as required by the approved erosion and sedimentation control plan.
- (C) The inspections required by this subsection are in addition to inspections required by G.S. 113A-61.1.

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10-20-7 Protection of Property

Persons conducting land-disturbing activities must take all reasonable measures to protect all public and private property from damage caused by such activities.

10-20-8 Maximum Peak Rate of Runoff

During construction, the planned soil erosion and sedimentation control practices and devices must be employed to restrict sedimentation soil losses from each land-disturbing site in accordance with plans approved by the Wake County Department of Environmental Services Sedimentation and Erosion Control Section. Such erosion and sedimentation control measures, structures, and devices must be planned, designed, and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates must be calculated using the procedures in the USDA, Soil Conservation Service's *National Engineering Field Manual for Conservation Practices*, or other calculation procedures acceptable to the County.

10-20-9 Grade

- (A) The angle for graded slopes and fills shall not be greater than the angle that can be retained by vegetative cover or other adequate erosion control devices or structures.
- (B) Slopes left exposed must be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion following completion of any phase or grading, or when grading equipment leaves the site in accordance the following stabilization timeframes:

Site Area Description	Stabilization Timeframe	Timeframe Exceptions	
Perimeter dikes, swales, ditches, slopes	7 days	None	
High Quality Waters (HQW) Zones	7 days	None	
Slopes steeper than 3:1	7 days	If slopes are 10' or less	
Slopes 3:1 or flatter	<u>14 days</u>	7 days for slopes greater than 50' in length.	
All other areas with slopes flatter than 4:1	<u>14 days</u>	None, except for perimeters and HQW zones	

(B)(C) The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its final modified configuration, with or without mechanical constraints.

10-20-10 Standards for High Quality Water (HQW) Zones

Land-disturbing activities to be conducted in High Quality Water Zones must be designed as follows:

(A) Uncovered Areas

Uncovered areas in High Quality Water (HQW) zones must be limited at any time to a maximum total area of 20 acres within the boundaries of the tract. Only the portion of the land-disturbing activity within a HQW zone is governed by this rule. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director of the North Carolina Division of Energy. Minerals and Land Resources—Land Resources.

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(B) Maximum Peak Rate of Runoff

Erosion and sedimentation control measures, structures, and devices within HQW zones must be planned, designed and constructed to provide protection from the runoff of the 25-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agricultural, Natural Resources Conservation Service's National Engineering Field Manual for Conservation Practices or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.

(C) Settling Efficiency

Sediment basins within HQW zones must be designed and constructed so that the basin will have a settling efficiency of at least 70% for the 40 micron (0.04mm) size soil particle transported into the basin by the runoff of that 2-year storm which produces the maximum peak rate of runoff. The maximum peak rate of runoff must be calculated according to procedures in the United States Department of Agriculture Natural Resources Conservation Services National Engineering Field Manual for Conservation Practices or according to procedures adopted by any other agency of this state or in the United States or any generally recognized organization or association.

(D) Grade

Newly constructed open channels in HQW zones must be designed and constructed with side slopes no steeper than 2 horizontal to 1 vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes must be sufficient to restrain accelerated erosion.

(E) Ground Cover

Ground cover sufficient to restrain erosion must be provided for any portion of all land-disturbing activity in a HQW zone within <u>7+5 working</u> days or <u>2+ calendar days</u>, whichever period is shorter. following completion of any phase or grading, or when grading equipment leaves the site.

10-20-11 Design Standards for Falls Lake Watershed

In addition to any other requirements of State, federal, and local law, land-disturbing activity in the Falls Lake Watershed shall meet all of the following design standards for sedimentation and erosion control:

- a. Erosion and sedimentation control measures, structures, and devices shall be planned, designed and constructed to provide protection from the runoff of the 25-year storm that produces the maximum peak rate of runoff as calculated according to procedures set out in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States.
- b. Sediment basins shall be planned, designed, and constructed so that the basin will have a settling efficiency of at least 70 percent for the 40-micron size soil particle transported into the basin by the runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States.

- c. Newly constructed open channels shall be planned, designed, and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit steeper side slopes or where the side slopes are stabilized by using mechanical devices, structural devices, or other ditch liners sufficient to restrain accelerated erosion. The angle for side slopes shall be sufficient to restrain accelerated erosion.
- d. For an area of land disturbing activity where grading activities have been completed, temporary or permanent ground cover sufficient to restrain erosion shall be provided as soon as practicable, but in no case later than seven calendar days after completion of grading. For an area of land-disturbing activity where grading activities have not been completed, temporary ground cover shall be provided as follows:
 - 1. For an area with no slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of 14 calendar days.
 - 2. For an area of moderate slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of 10 calendar days. For purposes of this Item, "moderate slope" means an inclined area, the inclination of which is less than or equal to three units of horizontal distance to one unit of vertical distance.
 - 3. For an area of steep slope, remporary ground cover shall be provided for the area if it has not been disturbed for a period of seven calendar days. For purposes of this Item, "steep slope" means an inclined area, the inclination of which is greater than three units of horizontal distances to one unit of vertical distance.

10-20-11 10-20-12 Standards for Landfills Standards for Landfills

- (A) Land disturbance permits for landfills are valid for five (5) calendar years. If no construction activity has begun within 2-years, the land disturbance permit becomes null and void.
- **(B)** A valid land disturbance permit is required for the duration of the "active life" of the landfill or phased permitted portion thereof until completion of closure activities.
- (C) Land disturbance permits for landfills may be renewed in 5-year increments.
- (D) Land Disturbance permits for landfills may be automatically renewed upon the certification of Financially Responsible Party and upon concurrence by County staff that there are no major modifications to the approved plan and that the project adheres to all current applicable standards.
- (E) Automatic permit renewals will not be subject to plan review and land disturbance permit fees.
- (F) No plan shall be approved unless it complies with all applicable state and Wake County erosion and sedimentation control and stormwater management requirements. Approval assumes the applicant's compliance with federal and state water quality and landfill laws, regulations and rules in addition to Wake County's regulations.
- (G) Adequate erosion and sediment control measures consisting of vegetative cover, materials, structures or devices must be utilized to prevent sediment from leaving the landfill facility.

10-21 Stormwater Outlet Protection

- (H) Whenever the County determines that significant erosion and sedimentation is occurring as a result of land-disturbing activity, despite application and maintenance of protective practices, the party conducting the land-disturbing activity will be required to and shall take additional protective action.
- (I) Adequate erosion and sediment control measures consisting of vegetative cover, materials, structures or <u>devices must devices</u> <u>bemust utilized to toutilized prevent to prevent excessive on-site erosion of the landfill facility or portion thereof.</u>
- (J) Erosion and sedimentation control measures, structures and devices for landfills must be designed, constructed and maintained to manage the calculated maximum peak rate of runoff generated by the 24-hour, 25-year storm event. Runoff rates must be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field manual for Conservation Practices, or the North Carolina Department of Environment and Natural Resources Erosion and Sediment Control Planning and Design Manual or other calculation procedures acceptable to Wake County.
- (K) Stormwater plan review for landfills shall be included in the plan review for _erosion and sedimentation control and stormwater improvements shall be permitted under the land disturbance permit upon payment of applicable land disturbances review and permit fees.
- (L) Landfills shall conform to the requirements of the Sedimentation and Pollution Control Law (15A NCAC 04) and any required NPDES permits.
- (M) Phased permits may be closed upon compliance with Wake County's certificate of completion requirements.

[Amended on 11/17/2008 by OA 07-08.]

10-21 Stormwater Outlet Protection

10-21-1 Applicability

This section does not apply where it can be demonstrated to the County that stormwater discharge velocities will not create an erosion problem in the receiving watercourse.

10-21-2 Purpose

Stream banks and channels downstream from any land-disturbing activity must be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land-disturbing activity.

10-21-3 Maximum Permissible Velocity

- (A) All land-disturbing activities must be planned and conducted so that the velocity of stormwater runoff in the receiving watercourse at the point of discharge resulting from a 10-year storm after development shall not exceed the greater of:
- (1) the velocity as determined from the table in this subsection; or
- (2) the velocity in the receiving watercourse determined for the 10-year storm prior to development.

10-21 Stormwater Outlet Protection

- (B) If the conditions in Sec. 10-21-3(A)(1) and Sec. 10-21-3(A)(2) cannot be met, then the receiving watercourse to and including the discharge point must be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the "prior to development" velocity by 10%.
- (C) The following is a table for maximum permissible velocity for stormwater discharges:

	num Stormwater Discharge Velocities	
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ay (very colloidal)		
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al silts (colloidal)		
e gravel (noncolloidal)		
es and shingles		Selection of the selection
s and hard pans	salasar a friga . e.s.	a on stand traction

For sinuous channels: multiply allowable velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

10-21-4 Acceptable Management Measures

Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. The County recognizes that the management of stormwater runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives include:

- (A) avoiding increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
- (B) avoiding increases in surface water discharge velocities by using vegetated or roughened swales or waterways in lieu of closed drains and high velocity paved sections;
- **(C)** providing energy dissipators at outlets of storm drainage facilities to reduce flow velocities at the point of discharge;
- (D) protecting watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining; or
- (E) upgrading or replacing the receiving device, structure, or watercourse so that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

10-22 Special Neuse And Cape Fear River Basin Regulations

10-22 Special Neuse And Cape Fear River Basin Regulations

10-22-1 Adoption

- (A) Section 15 A NCAC 2B.0233 has been adopted with changes as published 12:6 NCR 462-479 (Subchapter 2b - Surface Water and Wetlands Standards, Monitoring; Section .0200 -Classifications and Water Quality Standards Applicable to Surface Waters and Wetlands of North Carolina .0233 Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Protection and Maintenance of Riparian Areas with Existing Forest Vegetation).
- (B) The riparian buffer protection rules of 15 A NCAC 2B.0233 (Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Protection and Maintenance of Existing Riparian Buffers) apply to all lands within the Neuse River and Cape Fear River basins.

10-22-2 Applicability

All plans must meet the requirements of this management strategy or receive an exemption from the North Carolina Department of Environmental Quality and Natural Resources, Division of Water Resources Quality. The following is the management strategy for maintaining and protecting riparian areas in the Neuse River Basin:

(A) Riparian areas must be protected and maintained in accordance with the Neuse River regulations of this section on all sides of surface waters in the Neuse and Cape Fear River Basins (intermittent streams, perennial streams, lakes, ponds, and estuaries) as indicated on the most recent versions of United States Geological Survey 1:24,000 scale (7.5 minute quadrangle) topographic maps, and/or the Soil Survey for Wake County, North Carolina, whichever is more restrictive. The regulations of this section only apply to riparian areas where forest vegetation is established in Zone 1 as of July 22, 1997. Forest vegetation, as defined in 15A NCAC2B. 0202, of any width in Zone 1 must be protected and maintained in accordance with the Neuse River regulations of this section. The Neuse River regulations of this section do not establish new buffers in riparian areas. Exceptions to the Neuse River regulations for riparian areas are described in Sec. 10-22-2(B). Maintenance of the riparian areas should be so that, to the maximum extent possible, sheet flow of surface water is achieved. The Neuse River regulations of this section specify requirements that must be implemented in riparian areas to ensure that the pollutant removal functions of the riparian area are protected and maintained.

(B) Exceptions

The following water bodies and land uses are exempt from the riparian area protection requirements.

- (1) Ditches and manmade conveyances other than modified natural streams;
- When evidence from a field investigation reveals that areas mapped as intermittent streams, perennial streams, lakes, ponds, or estuaries on the most recent versions of United States Geological Survey 1:24,000 scale (7.5 minute quadrangle) topographic maps and/or the Soil Survey for Wake County, North Carolina, are not present as shown on the maps; then the property owner shall present the evidence from the field investigation to Wake County (Neuse of Cape Fear River Basins) or the North Carolina Division of Water Resources Quality (Neuse River Basin only) for concurrence.
- (3) Ponds and lakes created for animal watering, irrigation, or other agricultural uses that are not part of a natural drainage way that is classified in accordance with 15A NCAC 2B.0100;

10-22 Special Neuse And Cape Fear River Basin Regulations

- (4) Water dependent structures as defined in 15A NCAC2B.0202, provided that they are located, designed, constructed and maintained to provide maximum nutrient removal, to have the least adverse effects on aquatic life and habitat and to protect quality;
- (5) The following uses may be allowed where no practical alternative exists. A lack of practical alternatives may be shown by demonstrating that, considering the potential for a reduction in size, configuration or density of the proposed activity and all alternative designs, the basic project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters. Also, these structures must be located, designed, constructed, and maintained to have minimal disturbance, to provide maximum nutrient removal and erosion protection, to have the least adverse effects on aquatic life and habitat, and to protect water quality to the maximum extent practical through the use of best management practices.
- (a) road crossings, railroad crossings, bridges, airport facilities, and utility crossings;
- (b) stormwater management facilities and ponds, and utility construction and maintenance corridors for utilities such as water, sewer or gas, provided they are located in Zone 2 of the riparian area; are located at least 30 feet from the top of bank or mean high water line; and that they comply with the requirements for utility construction and maintenance corridors in Sec. 10-22-2 (B)_(6).
 - (6) A corridor for the construction and maintenance of utility lines, such as water, sewer or gas, (including access roads and stockpiling of materials) running parallel to the stream and located within Zone 2 of the riparian area, as long as no practical alternative exists and they are located at least 30 feet from the top of bank or mean high water line and best management practices are installed to minimize runoff and maximize water quality protection to the maximum extent practicable. Permanent, maintained access corridors must be restricted to the minimum width practicable and shall not exceed 10 feet in width except at manhole locations. A 10 feet perpendicular vehicle turnaround is allowed provided that turnarounds are spaced at least 500 feet apart along the riparian area.
 - (7) Stream restoration projects, scientific studies, stream gauging, water wells, passive recreation facilities such as boardwalks, trails, pathways, historic preservation and archaeological activities are allowed, provided that they are located in Zone 2 and are least 30 feet from the top of bank or mean high water line and are designed, constructed and maintained to provide the maximum nutrient removal and erosion protection, to have the least adverse effects on aquatic life and habitat, and to protect water quality to the maximum extent practical through the use of best management practices. Activities that must cross the stream or be located within Zone 1 are allowed as long as all other requirements of this subsection are met.
 - (8) Stream crossings associated with timber harvesting are allowed if performed in accordance with the *Forest Practices Guidelines Related to Water Quality* (15A NCAC 11.0201-0209).

10-22-3 Riparian Area Zones

The protected riparian area has two zones as follows:

(A) Zone 1

Zone I is intended to be an undisturbed area of forest vegetation. Any forest vegetation, as defined in Rule .0202 of 15A NCAC 2B, in Zone I as of July 22, 1997 must be maintained and protected in accordance with this section.

10-22 Special Neuse And Cape Fear River Basin Regulations

(1) Location

- (a) For intermittent streams and perennial streams, Zone 1 begins at the top of bank and extends landward a distance of 30 feet on all sides of the water body, measured horizontally on a line perpendicular to the water body.
- (b) For all other water bodies, Zone 1 begins at the top of bank or mean high water line and extends landward a distance of 30 feet, measured horizontally on a line perpendicular to the water body.

(2) Activities Allowed

The following practices and activities are allowed in Zone 1:

- (a) natural regeneration of forest vegetation and planting vegetation to enhance the riparian area if disturbance is minimized, provided that any plantings primarily consist of locally native trees and shrubs;
- (b) selective cutting of individual trees of high value in the outer 20 feet of Zone 1, provided that the basal area (measured at 12-inch diameter at breast height) remains at or above 0.52 square feet per running feet of the over 20 feet of Zone 1, as measured along the bank of the stream or water body. Limited mechanized equipment is allowed in this area;
- (c) horticultural or silvicultural practices to maintain the health of individual trees;
- (d) removal of individual trees that are in danger of causing damage to dwellings, other structures or the stream channel;
- (e) removal of dead trees and other timber cutting techniques necessary to prevent extensive pest or disease infestation if recommended by the Director of the North Carolina Division of Forest Resources and approved by the Director of the North Carolina Division of Water Resources Quality; and
- ongoing agricultural operations, provided that existing forest vegetation is protected and requirements in Rules .0236 and .0238 of 15A NCAC 2B are followed.

(3) Activities Prohibited

The following practices are expressly prohibited in Zone 1:

- (a) land-disturbing activities and placement of fill and other materials that would disturb forest vegetation, as defined in Rule .0202 of 15A NCAC 2B, other that those allowed in Sec. 10-22-2(B) and Sec. 10-22-3(A)(2);
- (b) new development, except as provided in Sec. 10-22-2(B);
- (c) new on-site sanitary sewage systems that use ground adsorption;
- (d) the application of fertilizer; and
- (e) any activity that threatens the health and function of the vegetation including, but not limited to, application of chemicals in amounts exceeding the manufacturer's recommended rate, uncontrolled sediment sources on adjacent lands, and the creation of any areas with bare soil.

10-22 Special Neuse And Cape Fear River Basin Regulations

(B) Zone 2

Vegetation in Zone 2 must consist of a dense ground cover composed of herbaceous or woody species that provides for diffusion and infiltration of runoff and filtering of pollutants.

(1) Location

Zone 2 begins at the outer edge of Zone 1 and extends landward a minimum of 20 feet as measured horizontally on a line perpendicular to the water body. The combined minimum width of Zones 1 and 2 must be at least 50 feet on all sides of the water body.

(2) Activities Allowed

The following practices and activities are allowed in Zone 2 in addition to those allowed in Zone 1:

- (a) periodic moving and removal of plant products such as timber, nuts, and fruit on a periodic basis, provided the intended purpose of the riparian area is not compromised by harvesting, disturbance, or loss of forest or herbaceous ground cover.
- (b) forest vegetation in Zone 2 may be managed to minimize shading on adjacent land outside the riparian area if the water quality function of the riparian area is not compromised.
- (c) ongoing agricultural operations, provided that requirements of Rules .0236 and .0238 of 15A NCAC 2B are followed.

(3) Activities Prohibited

The following practices and activities are not allowed in Zone 2:

- (a) land-disturbing activities and placement of fill and other materials, other than those allowed in Sec. 10-22-2(B), Sec. 10-22-3(A)(2) and Sec. 10-22-3(B)(2);
- (b) new development, except as provided in Sec. 10-22-2(B);
- (c) new on-site sanitary sewage that use ground adsorption;
- (d) the application of fertilizer; and
- (e) any activity that threatens the health and function of the vegetation including, but not limited to, application of chemicals in amounts exceeding the manufacture's recommended rate, uncontrolled sediment sources on adjacent lands, and the creation of any area with bare soil.

(4) Tree Removal

Timber removal and skidding of trees must be directed away from the watercourse or water body. Skidding must be done in a manner to prevent the creation of ephemeral channels perpendicular to the water body. Any tree removal must be performed in a manner that does not compromise the intended purpose of the riparian area and is in accordance with the *Forest Practices Guidelines Related to Water Quality* (15A NCAC 1I .0201-.0209).

(5) Sheet Flow

Maintenance of sheet flow in Zones 1 and 2 is required in accordance with this subsection.

(a) Sheet flow must be maintained to the maximum extent practical through dispersing concentrated flow and/or re-establishment of vegetation to maintain the effectiveness of the riparian area.

10-23 Maintenance

- (b) Concentrated runoff from new ditches and manmade conveyances must be dispersed into sheet flow before the runoff enters Zone 2 of the riparian area. Existing ditches and manmade conveyances, as specified in Sec. 10-22-2(B)(1), are exempt from this requirement; however, care should be taken to minimize pollutant loading through these existing ditches and manmade conveyances from fertilizer application or erosion.
- (c) Periodic corrective action to restore sheet flow should be taken by the landowner if necessary to impede the formation of erosion gullies which allow concentrated flow to bypass treatment in the riparian area.

(6) Maintenance Access

- (a) Periodic maintenance of modified natural streams such as canals is allowed provided that disturbance is minimized and the structure and function of the riparian area is not compromised.
- (b) A grassed travel way is allowed on one side of the water body when alternative forms of maintenance access are not practical. The width and specifications of the travel way must be limited to only that needed for equipment access and operation. The travel way must be located to maximize stream shading.

(7) Municipal Stormwater Management

If a local government has been issued a Municipal Separate Stormwater Sewer System permit or has been delegated to implement a local stormwater program, then the local government must ensure that the riparian areas to be protected are, as a standard practice, recorded on new or modified plats.

10-22-4 Variances

Where application of the regulations of this section would prevent all reasonable uses of a lot platted and recorded before June 3, 1974, a variance may be granted by the North Carolina Environmental Management Commission if it finds that:

- (A) practical difficulties or unnecessary hardships would result in strict application of applicable regulations.
- (B) such difficulties or hardships result from conditions which are peculiar to the property involved; and
- **(C)** the general purpose and intent of the regulations would be preserved, water quality would be protected and substantial justice would be done if the variance were granted.

10-23 Maintenance

- **10-23-1** During the development of a site, the person conducting the land-disturbing activity must install, routinely inspect and maintain in good working order all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this article, the North Carolina Sedimentation Pollution Control Act, or any order adopted pursuant to the erosion and sedimentation control regulations of this article or the North Carolina Sedimentation Pollution Control Act.
 - **10-23-2** After site development, the property owner or person in possession or control of the land must install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

- **10-23-3** Whenever the County determines that significant erosion and sedimentation is occurring as a result of land-disturbing activity, despite application and maintenance of protective practices, the person conducting the land-disturbing activity will be required to and shall take additional protective action.
- **10-23-4** All streets, sidewalks, greenways or other travel ways must be kept free from mud, dirt, dust or other material that may create a hazard to public safety or cause the travel way to be unreasonably muddy, as determined by the County.

Sections 10-24 through 10-29 are reserved for future use.

Part 3 Review and Approval Procedures

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

10-30-1 Applicability

- (A) Except as provided in Section 10-13, it is unlawful to conduct any land disturbing activity that will disturb more than one acre until both an approved erosion and sedimentation control plan and a land disturbance permit issued by the County have been obtained.
- (B) The County may require preparation and approval of an erosion and sedimentation control plan for land-disturbing activities that are one acre or less in area when sediment control measures are needed to protect against off-site damages.
- (C) A project may be developed in phases with separate erosion and sedimentation control plans and land disturbing permits for each phase.

10-30-2 Application Submittal and Acceptance of Erosion and Sedimentation Control Plan

(A) Submittal

A complete erosion and sedimentation control plan must be filed with the Wake County Department of Environmental Services at least 30 days prior to the anticipated start of the land-disturbing activity.

(B) Contents

The erosion and sedimentation control plan application submittal must include all of the following, with sufficient copies for necessary referrals and records, those forms, maps, plans, sets of calculations and other documents as prescribed by the Director of Environmental Services as necessary to determine compliance with applicable regulations or to address the required conclusions:

(1) Erosion and Sedimentation Control Checklist

The erosion and sedimentation control plan must contain at least all of the items specified on the Wake County Erosion and Sedimentation Control Checklist, including an application, administrative fees; architectural and engineering drawings; maps; assumptions; calculations; and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the erosion and sedimentation control regulations of this article. Detailed guidelines for plan preparation may be obtained from the Wake County Department of Environmental Services upon request.

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

(2) Financial Responsibility and Ownership

The erosion and sedimentation control plan must include an authorized statement of financial responsibility and ownership that complies with the following:

- (a) is signed by the financially responsible party for the land-disturbing activity or https://line.com/his-their Attorney in Factauthorized agent, including the mailing and street addresses of the principal place of business of the financially responsible party the owner of the land; and any designated-registered agents. A post office box is not an acceptable mailing address;
- (b) if the financially responsible party is not a resident of Wake County, a resident Wake County agent must be designated for the purpose of receiving notices of compliance or non-compliance with the erosion and sedimentation control plan, this article, the North Carolina Sedimentation Pollution Control Act or any other applicable erosion and sedimentation control regulations;
- (c) if the applicant is not the owner of the land to be disturbed, the erosion and sedimentation control plan must include the owner's written consent for the applicant to submit an erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity.
 - (3) The Director of Environmental Services may waive one or more application requirements by certifying in writing that such information is unnecessary in the particular case to determine compliance with the applicable regulations.

(C) Acceptance

- (1) The Director of Environmental Services must review a submitted plan and determine whether it complies with submittal requirements.
- (2) If the erosion and sedimentation control plan does not comply with submittal requirements, the Director of Environmental Services must notify the applicant of the submittal deficiencies and invite the applicant to revise the erosion and sedimentation control plan to correct the deficiencies.
- (3) No further processing of incomplete plans will occur until the deficiencies are corrected.
- (4) If or when the erosion and sedimentation control plan complies with all submittal requirements, the Director of Environmental Services must accept the application as complete.
- (5) An erosion and sedimentation control plan will be considered complete and ready for processing only if submitted according to the application completeness requirements of this article. The Director of Environmental Services must promptly notify the person submitting the erosion and sedimentation control plan that the 30-day time limit for review will not begin until the plan is deemed complete.

10-30-3 Review and Decision

- (A) The County must forward a copy of each erosion and sedimentation control plan for a land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of the tract to the Director of the North Carolina Division of Water Resources Water Resources Quality.
- (B) After accepting an erosion and sedimentation control plan as complete, the Director of Environmental Services must refer it to appropriate staff for review.

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

- (C) The review staff must review the erosion and sedimentation control plan, determine whether the proposed activity complies with all applicable regulations, identify any noncompliant features, and whenever feasible, suggest modifications to correct the noncompliant features.
- (D) Within 30 days of receipt of a complete initial plan submittal, and within 15 days of receipt of each revised plan, the Wake County Department of Environmental Services must notify the applicant that the plan has been approved, approved with modifications, approved with performance reservations, or disapproved.
- (E) Failure to approve, approve with modifications, approve with performance reservations or disapprove a complete initial erosion and sedimentation control plan within 30 days of receipt constitutes an action of approval.
- (F) Failure to approve, approve with modifications, approve with performance reservations or disapprove a resubmission of an erosion and sedimentation control plan within 15 days of receipt constitutes an action of approval.
- (G) No plan shall be approved unless it complies with all applicable state and County regulations for soil erosion and sedimentation control. Plan approval shall be conditioned upon the applicant's compliance with federal and state water quality laws, regulations, and rules. Approval assumes the applicant's compliance with federal, state water quality laws, regulations and rules.
- **(H)** Applicant shall provide documentation, when requested, of compliance with federal, state and local laws, regulations and rules.
- (I) Denial of the erosion and sedimentation control plan must specifically state in writing the reasons for denial.
- (J) If an erosion and sedimentation control plan has been disapproved, the applicant has 12 months to submit revised plans addressing the reasons for disapproval or the erosion and sedimentation control plan is deemed null and void.

10-30-4 Decision-making Criteria

(A) An erosion and sedimentation control plan may be disapproved if the erosion and sedimentation control plan fails to adequately address the following control objectives:

(1) Identify Critical Areas

On-site areas that are subject to severe erosion, and off-site areas that are especially vulnerable to damage from erosion and/or sedimentation, must be identified and receive special attention.

(2) Limit Time of Exposure

All land-disturbing activities must be planned and conducted to limit exposure to the shortest feasible time.

(3) Limit Exposed Areas

All land-disturbing activity must be planned and conducted to minimize the size of the area to be exposed at any one time.

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

(4) Control Surface Water

Surface water runoff originating upgrade of exposed areas must be controlled to reduce erosion and sediment loss during the period of exposure.

(5) Control Sedimentation

All land-disturbing activity must be planned and conducted to prevent off-site sedimentation damage.

(6) Manage Stormwater Runoff

When the increase in the velocity of stormwater runoff resulting from a land-disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans must include measures to control the velocity at the point of discharge to minimize accelerated erosion of the site and increased sedimentation of the stream.

- (B) The County must disapprove an erosion and sedimentation control plan or draft plans if implementation of the erosion and sedimentation control plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters.
- (C) The County may disapprove an erosion and sedimentation control plan upon finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant, within the 2 years prior to the application date:
- (1) is conducting or has conducted land-disturbing activity without an approved plan, or has received a notice of violation on a previously approved erosion and sedimentation control plan and has not complied with the notice within the time specified;
- (2) has failed to pay a civil penalty assessed pursuant to the North Carolina Sedimentation Pollution Control Act or a local ordinance adopted pursuant to the North Carolina Sedimentation Pollution Control Act by the time the payment is due;
- (3) has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the North Carolina Sedimentation Pollution Control Act; or
- (4) has failed to substantially comply with state rules or local ordinances and regulations adopted pursuant to the North Carolina Sedimentation Pollution Control Act.
- (5) When an erosion and sedimentation control plan is disapproved under the provisions of this subsection, the County must notify the Director of the North Carolina State Division of Energy.

 Minerals and Land Resources Land Resources of Resources of such disapproval within 10 days. The County must advise the applicant and the North Carolina State Division of Energy. Minerals and Land Resources in Resources in writing as to the specific reasons that the erosion and sedimentation control plan was disapproved.

10-30-5 Amendment of Plans

- (A) Application for amendment of an erosion and sedimentation control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until the County approves the amendment, the land-disturbing activity shall not proceed except in accordance with the erosion and sedimentation control plan as originally approved.
- (B) The County must require a revised plan if it determines, upon review of an erosion and sedimentation control plan or inspection of the job site, that a significant risk of accelerated erosion

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

or off-site sedimentation exists, and the erosion and sedimentation control plan is inadequate to meet the requirements of this article. Pending the preparation of the revised plan, work must stop or continue only under conditions outlined by the appropriate authority.

10-30-6 Validity of Plan, Lapse of Approval

An approved erosion and sedimentation control plan is valid for 2 calendar years from the date of approval. If a land disturbance permit has not been obtained within the 2-year period, the erosion and sedimentation control plan approval becomes null and void.

10-30-7 Land Disturbance Permit Requirements

Land disturbance permits may be obtained upon satisfaction of the following items:

(A) Application

The applicant must provide to the Wake County Department of Environmental Services the number of copies of the approved erosion and sedimentation control plan as prescribed by the Director of Environmental Services.

(B) Fees

Payment of fees established by the Wake County Board of Commissioners for administration of these erosion and sedimentation control regulations must be made at the pre-construction conference.

(C) Pre-Construction Conference

A pre-construction conference with County staff is required prior to issuance of the land disturbance permit.

(D) Certificate of Compliance

A certificate of compliance for preliminary soil erosion and sedimentation control must be issued confirming that initial soil erosion and sedimentation controls have been installed in accordance to the approved plan.

- (1) Grading, other than for installation of soil erosion and sedimentation control measures, is prohibited prior to the issuance of a certificate of compliance.
- (2) The certificate of compliance must be issued prior to the approval by the County of an application for building construction in the County, in any of the incorporated areas of the County, or extraterritorial jurisdictional areas of the municipalities of the County subject to the erosion and sedimentation control regulations of this article.

(E) Additional Requirements

- (1) No land disturbance permit may be issued until the County is assured that the proposed landdisturbing activity will be carried out in accordance with the proposed soil erosion and sedimentation control plan;
- (2) No land disturbance permit will be issued on property owned by the same individual, corporation, etc. that is in violation of the erosion and sedimentation control regulations of this article until that violation is corrected.

10-30 Erosion and Sedimentation Control Plan and Land Disturbance Permit

10-30-8 Actions Required Prior to Land Disturbance

(A) Onsite Plan and Permit

An erosion and sedimentation control plan approval and land disturbance permit issued under this article must be prominently displayed until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. A copy of the approved plan must be kept on file at the job site.

(B) Notice of Activity Initiation

No person shall initiate a land-disturbing activity until notifying the agency that issued the erosion and sedimentation control plan approval of the date that the land-disturbing activity will begin.

10-30-9 Effect of Permit Issuance; Lapse of Approval

(A) The <u>initial</u> land disturbance permit is valid for 2 calendar years except as otherwise noted in Section 10-20-12 Standards for Landfills 10-20-12 Standards for Landfills 10-20-12 Standards for Landfills If no construction activity has begun within the 2-year period, the land disturbance permit becomes null and void. If construction activity has begun, but the certificate of completion has not been issued within the 2 years, the land disturbance permit must be renewed.

[Amended on 11/17/2008 by OA 07-08.]

- (B) The land disturbance permit_ may be renewed for a maximum of one or two years as either a single two-year extension or in two one-year extensions by submitting a request for a permit extension 30 days prior to the expiration date and payment of all applicable land disturbance fees. Permit renewal fees for the one-year extension will be prorated at 50% of the two-year renewal fee. Extension of the original permit approval beyond the maximum two-year renewal period is not allowed. Any change of ownership must be reflected in a revised financial responsibility form.
- (C) Projects may be phased using multiple permits. The phasing of a project under a single permit is not allowed. Each project phase requires a separate and independent plan submittal, review fees, permit approval and payment of applicable land disturbance fees.

Commentary: The phasing of large and/or complex projects should be considered when it is anticipated that the maximum permit validity period of 4 years (the original permit has a 2 year validity, plus the maximum renewal period of 2 years) may be insufficient to complete all work or in instances where it may be desirable to obtain certificates of completion for phases, rather than one certificate of completion for the entire project.

- (D) Failure to renew the land disturbance permit, in accordance with this section, is the same as failure to submit an erosion and sedimentation control plan in accordance with this article and may be subject to a civil penalty of up to \$5,000 per day. Any person who is subject to civil penalty under this subsection may be subject to additional civil penalties for violation of any other provisions of this article, or rules or orders adopted or issued pursuant to the erosion and sedimentation control regulations of this article.
- (E) All site improvements, as shown on the approved plan, must be completed by the end of the one-year renewal period and before the certificate of completion is issued, if the land disturbance permit is not renewed for an additional 1-year period as allowed by this section. Any person who fails to meet the conditions of the renewal will be subject to a civil penalty as set forth in Part 4 of this article.

10-31 Inspections

(F) If the property associated with the approved plan is sold in whole or in part before all conditions of the approved plan are met, the land disturbance permit holder must provide notice to the new owner of conditions of the land disturbance permit and provide Wake County Environmental Services with revised financial responsibility forms.

10-31 Inspections

10-31-1 Authority

- (A) The County has the power to conduct investigations as it reasonably deems necessary to carry out its duties as prescribed in this article. For this purpose, County officials may enter any property, public or private, at reasonable times for the purpose of investigating and inspecting the sites of any land-disturbing activity. No person shall refuse entry or access to any authorized representative or agent for the County who requests entry for purposes of inspections, and presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representatives while in the process of carrying out their official duties.
- (B) Agents and officials of the County will periodically inspect land-disturbing activities to ensure compliance with the North Carolina Sedimentation Pollution Control Act, this article, or rules or orders adopted or issued pursuant to this article, and to determine whether the measures required in the erosion and sedimentation control plan are effective in controlling erosion and sedimentation resulting from land-disturbing activity. Notice of right to inspect must be included in the certificate of approval of each plan.
- (C) Any land-disturbing activity will be the responsibility of the person(s) conducting the land disturbing activity, including the property owners. Failure to prevent off site sedimentation will be deemed a violation of the erosion and sedimentation control regulations of this article.
- (D) The County may require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.
- (E) If through inspections the County determines that significant erosion or sedimentation is occurring as a result of land-disturbing activity, despite application and maintenance of protective practices, the person conducting the land-disturbing activity will be required by the Director of Environmental Services or authorized representative to take additional protective action.

10-31-2 Certificate of Completion

- (A) A certificate of completion must be issued when inspections indicate that:
- (1) all conditions of the approved land disturbance permit are met;
- (2) all soil disturbing activity is completed and exposed soils have been stabilized with a vegetative cover with a density of at least 80% or covered with a structural stabilization method. Permanent perennial vegetation may include the use of sod, shrubs, and ground cover plants mixed with mulching, aggregate or other landscaping techniques. Structural methods include concrete, retaining wall or other stabilization techniques: disturbed areas are stabilized with permanent ground cover, permanent armor, or impervious surface;
- (3) all proposed roads, utilities, permanent erosion control devices, and other infrastructure has been installed according to approved plans;
- (4) all requirements of the approved stormwater plan are met; and

10-32 Appeals

- (5) all temporary sediment control devices required by the approved erosion and sedimentation control plan are removed or are converted to permanent stormwater devices pursuant to an approved stormwater plan.
- (B) For approved plans involving a proposed public road dedication:
- (1) once a certificate of completion is issued and a petition for North Carolina Department of Transportation acceptance is submitted to the Wake County Department of Environmental Services, notification must be mailed to the North Carolina Division of Highways District 1 Office; and
- (2) the notification must state that the project has been issued a certificate of completion and must describe the project in detail with publicly dedicated streets described by name and approximate length.

10-32 Appeals

10-32-1 Local Appeal of Plan Disapproval or Modification

(A) Authority

If any proposed erosion and sedimentation control plan is disapproved or modified by the County, the person submitting the erosion and sedimentation control plan is entitled to a public hearing before the Director of Environmental Services.

(B) Filing

The person who submitted the erosion and sedimentation control plan must submit a written request for a hearing within 15 days after receipt of the written notice of the disapproval or modification.

(C) Hearing

- (1) A hearing before the Director of Environmental Services must be conducted within 30 days after receipt of the request.
- (2) At least 7 days prior to the hearing, the Director of Environmental Services must publish a notice of the hearing, at least once, in a newspaper of general circulation in the County.
- (3) The Director of Environmental Services must render a decision in writing within 7 days of the public hearing.

(D) Notice of Decision

- (1) In the event that the appeal is not granted, the Director of Environmental Services must notify the Director of the North Carolina Division of Energy, Minerals and Land Resources of the disapproval within 10 days.
- (2) The Director of Environmental Services must advise the applicant and the Director of the North Carolina Division of Energy, Minerals and Land Resources in writing as to the specific reasons that the request was disapproved.

(E) Subsequent Appeals

If the Director of Environmental Services does not grant the appeal, the person submitting the erosion and sedimentation control plan has 15 days following the denial to appeal the

10-42 Civil Penalties

County's decision to the North Carolina Sedimentation Control Commission as provided in G.S. 113A-61(c) and 15A NCAC 4B .0118(d).

10-32-2 Direct Appeal to State Agency

If any proposed erosion and sedimentation control plan is disapproved, the applicant may appeal the Director of Environmental Service's decision directly to the North Carolina Sedimentation Control Commission.

Sections 10-33 through 10-39 reserved for future use.

Part 4 Enforcement and Penalties

10-40 Violations

Unless lawfully exempted, the following actions constitute a violation of this article and will be deemed in violation of this article and subject to the enforcement and penalty provisions of this article and Article 20 of the UDO:

- 10-40-1 to engage in land-disturbing activity without filing an erosion and sedimentation control plan in accordance with the regulations of this Aarticle;
- 10-40-2 to conduct a land-disturbing activity except in accordance with provisions of an approved plan and the land disturbance permit requirements of this article:
- **10-40-3** to fail to protect against off-site sedimentation damage when conducting any land-disturbing activity;
- **10-40-4** to leave dirt, mud or other material on any travel way in a manner that is determined to be a hazard to public safety or deemed detrimental to the waters of the State;
- **10-40-5** to violate or continue to violate any other provisions of this article, the North Carolina Sedimentation Pollution Control Act, or rules or orders adopted pursuant to this article.

10-41 Notice of Violation

- 10-41-1 If the Director of Environmental Services determines that a person conducting a land-disturbing activity has violated this article, a notice of violation shall be served upon that person. The notice may be served by any means authorized under GS 1A-1, Rule 4. The notice must:
- (A) specify a date by which the person must come into compliance with the applicable standards; and
- (B) inform the person of the actions that need to be taken to be brought into compliance.
 - **10-41-2** Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this ordinance.

10-42 Civil Penalties

10-42-1 Maximum Penalty

Any person who commits a violation according to Sec. 10-40 is subject to a maximum civil penalty of up to \$5,000 per violation per day. A civil penalty may be assessed from the date of the violation. Each day of a continuing violation constitutes a separate violation.

10-42 Civil Penalties

10-42-2 Civil Penalty Assessment Factors

The Director of Environmental Services is authorized to assess the penalty. Fines will be determined by considering the following:

- (A) the degree and extent of harm caused by the violation;
- (B) the cost of rectifying the damage;
- (C) the money saved by the violator by non-compliance
- (D) whether the violation was willful; and
- (E) the prior record of the violator.

10-42-3 Notice of Civil Penalty Assessment

The governing body of the County must provide notice of the civil penalty amount and the basis for assessment to the person assessed. The notice of assessment must be served by any means authorized under G.S. 1A-1, Rule 4 and must direct the violator to either pay the assessment or appeal the assessment within 30 days after receipt of the notice of assessment.

10-42-4 Appeal of Civil Penalties

(A) Local Appeal

The person conducting the land-disturbing activity may appeal the assessment of civil penalties to the Director of Environmental Services within 30 days of receipt of the notice of assessment. The Director of Environmental Services must consider any and all extenuating or mitigating circumstances in determining whether to uphold, reduce, or waive the civil penalty:

(B) State Remission of Civil Penalties

A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the Commission within 60 days of receipt of the notice of assessment. Any such remission request must comply in all respects with the requirements set forth in G.S. 113A-64.2, including the requirement that any such remission request must be accompanied by a waiver of the right to a contested case hearing pursuant to Chapter 150B of the General Statutes, and a stipulation of the facts on which the assessment was based. A request for remission of a civil penalty imposed under G.S. 113A-64 may be filed with the Commission within 60 days of receipt of the notice of assessment in accordance with rules promulgated under G.S. 113A-64.2.

10-42-5 Demand for Payment

- (A) The Director of Environmental Services must make a written demand, by registered or certified mail, return receipt requested, or other means provided in GS 1A-1, Rule 4 for payment upon the person in violation, and must set forth, in detail, a description of the violation for which the penalty has been imposed.
- (B) If the payment is not received or equitable settlement reached within 30 days after demand for payment is made, the matter must be referred to the County Attorney for institution of a civil action

10-47 Civil Relief

in the name of the County, in the appropriate division of the General Court of Justice in Wake County for recovery of the penalty.

10-42-6 Payment of Penalties

Civil penalties collected pursuant to this ordinance must be credited to the Civil Penalty and Forfeiture Fund.

10-43 Stop Work Order

If the County, upon site inspection determines that due care for plan implementation is inadequate to meet the requirements of this article the County may issue a stop work order in accordance with the decision-making criteria of Sec. 10-30-4. Upon the issuance of a stop work order, the Director of Environmental Services must require that all provisions of this article be met.

10-44 Road Cleaning

Any person or companies determined in violation of Sec. 10-23 will be charged for road cleaning at the rate of \$300 per hour for the first hour or part of hour and \$200 per hour or part of hour thereafter until work is completed as specified by the County's authorized agent.

10-45 Criminal Penalties

Any person who knowingly or willfully violates or continues to violate any provision of this article according to Sec. 10-40 is guilty of a class 2 misdemeanor which may include a fine not to exceed \$5,000 per violation per day as provided in G.S. § 113A-64.

10-46 Injunctive Relief

10-46-1 Initiation

- (A) Whenever the Director of Environmental Services has reasonable cause to believe that a person is violating or threatening to violate this article, a rule or order adopted or issued pursuant to this article, or any term, condition, or provision of an approved erosion and sedimentation control plan, the Director may institute a civil action in the name of the County for injunctive relief to restrain the violation or threatened violation.
- (B) The action must be brought in the Superior Court of Wake County, either before or after the institution of any other action or proceeding authorized by the erosion and sedimentation control regulations of this article.

10-46-2 Court Action

- (A) Upon determination by a court that an alleged violation is occurring or is threatened, the court must enter orders or judgments as are necessary to abate the violation, to ensure that restoration is performed, or to prevent the threatened violation.
- (B) The institution of an action for injunctive relief under this section does not relieve any party to the proceeding from any civil or criminal penalty prescribed for violations of the erosion and sedimentation control regulations of this article.

10-47 Civil Relief

10-47-1 Any person injured by a violation of this article, or of any rule, regulation, or order duly adopted by the Wake County Board of Commissioners, or by the initiation or continuation of a land-disturbing activity for which an erosion and sedimentation control plan is required other

10-48 Restoration After Non-Compliance

than in accordance with the terms, conditions, and provisions of an approved plan, may bring a civil action against the person alleged to be in violation. The action may seek:

- (A) injunctive relief;
- (B) an order enforcing the erosion and sedimentation control regulations of this article or rule, regulation, order or erosion and sedimentation control plan violated;
- (C) damages caused by the violation;
- (D) both damages and injunctive relief; or
- (E) both damages and enforcement order.
 - 10-47-2 Civil action under this section may be brought in the Superior Court of Wake County. The court, in issuing any final order in any action brought pursuant to this section may award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever it determines that such an award is appropriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security with the amount of the bond or security to be determined by the court.
 - **10-47-3** Nothing in this section restricts any right that any person (or class of persons) may have under any statute or common law to seek injunctive or other relief.

10-48 Restoration After Non-Compliance

The County may require a person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by this article and G.S. 113A-57 (3), to restore the affected waters and land to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

[Article 10 amended 11/19/2007 by OA 02-07]

APPENDIX B

Clean Water Education Partnership Agreement with Town of Garner

Membership Agreement for Clean Water Education Partnership (CWEP) Services Provided by the Triangle J Council of Governments

This Memorandum of Understanding by and between the undersigned local government (Local Government) and the Triangle J Council of Governments (TJCOG) pertains to the services provided by TJCOG under the Clean Water Education Partnership (CWEP) program.

WITNESSETH:

WHEREAS, CWEP and local government stormwater programs have the same basic mission of providing stormwater outreach and education; and

WHEREAS, CWEP is a program administered by TJCOG that has excelled in providing direct education and mass media to its wide variety of partner communities;

NOW, THEREFORE, TJCOG, via CWEP, will prepare and make available to the Local Government the following direct education and mass media items:

- 1. TJCOG's CWEP Program will assist the Local Government with the following education/ outreach tasks during the term of this MOU related to direct educational programming:
 - a. Provide physical and digital outreach materials for local governments and target audiences that describe target pollutants and their likely sources and impacts on water quality
 - b. Maintain an internet website conveying the CWEP program's messages about stormwater pollution
 - c. Make available for download via website outreach materials for target audiences, and distribute materials at in-person or digital community events
 - d. Post on social media channels to promote CWEP's key messages
 - e. Provide unlimited local use and access to original and compiled educational materials on CWEP program website, to include educational videos, printable and digital lessons, lesson plans, and other resources useful for educating a variety of ages and audiences in various settings
 - f. Coordinate annually with stormwater staff and/or relevant educational contacts (as requested by the Local Government) to schedule and conduct stormwater education activities that correlate with NC Essential Science Standards or provide opportunities for citizen participation which may include stream cleanups, citizen science activities, or similar efforts. CWEP will coordinate with the CWEP local government representative prior to contacting any formal educators in the member jurisdiction.
 - g. Provide mechanisms on CWEP program website for public input on stormwater issues

- 2. TJCOG's CWEP program will assist the Local Government with the following mass media programming:
 - a. Coordinate an annual outreach campaign in the form of Public Service Announcements (PSAs) administered by local service providers, which includes the following:
 - Videos about common target pollutants, their likely sources, their negative impact on water quality, and best practices for target audiences likely to have significant stormwater impacts
 - ii. Static and animated banner ads about stormwater quality that link to the program website
 - iii. Approximately 12 weeks (as market costs allow) of digital pre-roll video PSAs, spread across popular stations with the aim of reaching a variety of target audiences.
 - iv. Approximately 8 weeks (as market costs allow) of television, radio, social media and/or digital PSAs across popular stations with the aim of reaching a variety of target audiences. CWEP will make an effort to ensure that media reach adequately covers member jurisdictions. Additional stations/programs may be proposed by local media companies and approved collectively by members.
 - v. Print and digital advertising in Spanish-language newspaper(s).
 - b. Provide unlimited local use and access to outreach materials created for CWEP Partners to inform target audiences about target pollutants, their likely sources and impacts on water quality
 - c. Provide unlimited local use and access of digital media materials for Partner jurisdictions' use in public buildings, parks, DMV locations, outdoor movies, etc
 - d. Promote regional education and engagement events such as the CWEP Regional Creek Week through CWEP website and social media platforms

Local Governments may use the tasks above to help comply with NPDES MS4 stormwater education requirements or nutrient strategy stormwater education requirements. The Local Government's signature on this MOU (and MS4 permit number if applicable) signifies an understanding that any one of the items listed above may only partially fulfill its education requirements during an audit from NC DEQ. Accordingly, the Local Government acknowledges that it is ultimately responsible for meeting all federal and state laws, rules and regulations related thereto. The Local Government and CWEP share responsibility for determining how specific objectives can be cooperatively achieved, with the understanding that CWEP supplements local efforts to comply with regulatory requirements. The Local Government is highly encouraged to send one or more representatives to CWEP's quarterly steering committee meetings to collaborate on strategies. CWEP will make every reasonable attempt, as permitted by available staffing and supplies, to independently and proactively address the objectives in the Local Government's community, and will update the CWEP Local Government representative each quarter to offer opportunities for discussion and collaboration.

The Local Government agrees to pay TJCOG for the services provided herein based on a fee schedule adopted by TJCOG, voted on by CWEP Local Governments, and incorporated herein by reference. The fee schedule and individual Local Governments' cost shares may change annually in the second and third year of the agreement if population estimates generated by the NC State Demographer's Office show population changes. The period of performance under, and the term of, this MOU will begin on July 1,

2022 and will conclude on June 30, 2025. This agreement automatically renews for a total of 3 years unless either party gives 90-day notice prior to end of the term. The Local Government reserves the unilateral right to terminate this MOU for cause or convenience (in the case of cause, immediately, and in the case of convenience, upon 90 calendar days' written notice), whereupon CWEP and TJCOG will only be entitled to prorated compensation for services properly rendered up to the date of termination.

CWEP will provide an annual report by August 31 on the prior fiscal year's local and regional outreach and education, to include both description and numbers for both mass media and direct education efforts. Interim numbers can be provided as needed.

IN WITNESS WHEREOF, both the Local Government and TJCOG have caused this MOU to be executed by their chief executive officers, all as of the day and year first above written.

Town of barner	N C S0000470
City/Town/County Name	MS4 Permit Number, if applicable
RODNEY DICKERSON	TOWN MANAGER
Signatory Print Name	Title
Rodny Diken	6/20/22
Signature	Date Signed
TRIANGLE J COUNCIL OF GOVERNMENTS	
ful my	6/27/2022
Executive Director, TJCOG	Date

Exhibit A. CWEP FY23 Fee Schedule

TJCOG Clean Water Education Partnership Program FY23 Fee Schedule

Example Only; will be updated annually as certified population estimates are updated.

	Base Cost	Population* for FY23 (based on July 2020 certified pop from NC State Demographics)	FY23 Cost Share (\$0.041 per cap)
Town of Apex ^{2,5}	\$2,000	59,368	\$4,434
Town of Benson ²	\$2,000	3,998	\$2,164
Town of Butner ²	\$2,000	8,401	\$2,344
Town of Carrboro 2,5	\$2,000	21,344	\$2,875
Town of Cary 1,2,5	\$2,000	175,635	\$9,201
Town of Chapel Hill 2,5 *	\$2,000	54,236	\$4,224
Chatham County 5,6	\$2,000	60,349	\$4,474
Town of Clayton ²	\$2,000	26,517	\$3,087
City of Creedmoor ²	\$2,000	4,869	\$2,200
City of Durham 1,3,5	\$2,000	284,317	\$13,657
Durham County 1,5	\$2,000	37,167	\$3,524
City of Fayetteville ^{2,3} *	\$2,000	188,230	\$9,717
Town of Fuquay-Varina ²	\$2,000	34,604	\$3,419
Town of Garner 1,2	\$2,000	31,306	\$3,284
City of Goldsboro ^{1,2}	\$2,000	34,156	\$3,400
City of Havelock ¹	\$2,000	17,759	\$2,728
Town of Hillsborough ²	\$2,000	9,681	\$2,397
Town of Holly Springs ²	\$2,000	41,711	\$3,710
Town of Hope Mills ²	\$2,000	17,811	\$2,730
Johnston County 1	\$2,000	154,728	\$8,344
City of Kinston ¹	\$2,000	19,873	\$2,815
Town of Knightdale ²	\$2,000	19,656	\$2,806
Town of Leland ²	\$2,000	23,049	\$2,945
Town of Morrisville ^{2,5}	\$2,000	29,925	\$3,227
Nash County ^{4,6}	\$2,000	41,284	\$3,693
Town of Nashville ^{2,4}	\$2,000	5,635	\$2,231
City of New Bern 1,2	\$2,000	31,240	\$3,281
Orange County 1,5,6	\$2,000	55,500	\$4,276
City of Oxford ⁴	\$2,000	8,632	\$2,354
Town of Pittsboro ⁵	\$2,000	4,556	\$2,187
City of Raleigh 1,3 *	\$2,000	468,977	\$21,228
City of Rocky Mount 2,4	\$2,000	54,309	\$4,227
Town of Rolesville	\$2,000	19,278	\$2,790
City of Roxboro ²	\$2,000	8,131	\$2,730
Town of Siler City	\$2,000	7,733	\$2,333
Town of Smithfield ¹	\$2,000	11,378	\$2,466
Town of Spring Lake ²	\$2,000	11,662	\$2,478
Town of Tarboro ⁴	\$2,000	10,685	\$2,438
Town of Wake Forest ²	\$2,000	48,062	\$3,971
Wayne County ^{1,6}	\$2,000	75,399	\$5,091
Town of Wendell 1,2	\$2,000	9,901	\$2,406
Town of Zebulon ² Subject to Neuse River Basin Nutrient Mana	\$2,000	6,969	\$2,286

Subject to Neuse River Basin Nutrient Management Regulations.
 Subject to NPDES Phase II Stormwater Regulations.

^{3.} Subject to NPDES Phase I Stormwater Regulations.

^{4.} Subject to Tar-Pamlico River Basin Nutrient Management Regulations.

^{5.} Subject to Jordan Lake Nutrient Management Regulations.

^{6.} MS4 Post-Construction "Tipped Counties"

^{*}Populations have been adjusted for group quarters covered by another state stormwater permit

APPENDIX C

2023 Unified Development Ordinance Update for Nitrogen Control

ORDINANCE NO. (2023) 5194

AN ORDINANCE TO AMEND ORDINANCE NO. (2022) 5132 ENTITLED
"THE 'GARNER FORWARD' TOWN OF GARNER UNIFIED DEVELOPMENT ORDINANCE
FOR THE TOWN OF GARNER AND ITS EXTRATERRITORIAL JURISDICTION"
REGARDING REGULATIONS RELATED TO NEW STORMWATER REQUIREMENTS FOR
NITROGEN CONTROL

WHEREAS, the Town Council has conducted a public hearing and received a written recommendation from the Planning Commission regarding zoning text amendment case # ZTA-23-01 in keeping with the requirements of Section 4.6.3 of the Town of Garner Unified Development Ordinance; and

WHEREAS, the Town Council finds that this request to amend the UDO reflects changes required by State Statute, NCGS Ch. 150B-21.2A; and

WHEREAS, the Town Council further finds the request is reasonable and in the public interest because it reflects a significant change in conditions or support a public policy established by the Town since the adoption of applicable land use plans;

NOW, THEREFORE, THE TOWN COUNCIL OF THE TOWN OF GARNER HEREBY ORDAINS:

Section One. That Section 11.2.1. "Stormwater Requirements for Nitrogen Control" be amended to read as follows:

11.2.1. Stormwater Requirements for Nitrogen Control

All new development shall meet the requirements of the "The-Town of Garner Stormwater Program for Nitrogen Control." The major requirements that must be met by new development, as contained in the stormwater program, are as follows:

- A. New development shall comply with the requirements for protecting and maintaining riparian buffers as specified in the Riparian Buffer Rule 15A NCAC 2B.0233.
- B. Project area used for nitrogen calculations and stormwater requirements includes the site area less any existing built upon area. The project density used for determining stormwater requirements is the amount of built upon area subject to this section.
- C. Developers shall provide onsite stormwater treatment for all cumulative built upon area if the project density is greater than twenty-four (>24%) percent and must meet other low density, high density and other requirements of DEMLR's 02H.1003 Stormwater Rule.

- D. Additional built upon area and expansions of built upon area beyond the above limitations in subsection C, must comply with the stormwater treatment and nutrient requirements set forth in the Town of Garner Stormwater Program for Nitrogen Control.
- E. For all lots, portions of lots, planned rights-of-way, and common areas established within subdivisions after the date of ordinance adoption, estimated new built upon area for lots as well as multifamily and commercial development will be calculated based on densities of the following table:

Туре	BUA Calculation	Stormwater Requirement		
Less than or equal to R4 Single Family	Built Upon Area (BUA) is calculated for the overall subdivision, with BUA on individual residential lots estimated at 35% impervious area	Subdivision-level stormwater control required; 24% BUA or greater for the overall subdivision requires installation of stormwater control measure(s)		
R8 Single Family	Built Upon Area (BUA) is calculated for the overall subdivision, with BUA on individual residential lots estimated at 45% impervious area	Subdivision-level stormwater control required; 24% BUA or greater for the overall subdivision requires installation of stormwater control measure(s)		
Multifamily	Built Upon Area (BUA) is calculated for the development with calculated known impervious surface area	24% BUA or greater for the development requires installation of stormwater control measure(s)		
Commercial	Built Upon Area (BUA) is calculated for the development with calculated known impervious surface area	24% BUA or greater for the development requires installation of stormwater control measure(s)		

- F. Projects shall meet either a stormwater nitrogen loading rate target of 3.6 pounds per acre per year (lb/ac/yr) or meet "runoff volume match" as defined in 15A NCAC 02H.1002.
- G. The developer shall determine the nitrogen loading rate generated from the development project area without engineered stormwater controls and determine the required nitrogen load reduction to meet nutrient targets by using the most recently approved tool provided by NCDEQ.
- H. Nitrogen loading standards are supplemental to, not replacements for, stormwater standards otherwise required by federal, state or local law, including without limitation any riparian buffer protection requirements of 15A NCAC 02B.0714 and .0295.
- I. All projects shall meet the stormwater system design requirements set forth in 15A NCAC 02H.1003. Projects shall use a project density threshold of greater than twenty-four (>24%) percent built upon area, where upon high density stormwater design is required. All engineered stormwater controls will meet the standards set in the Design Manual and the State's Minimum Design Criteria, 15A NCAC 02H.1050 through .1062.
- J. When high density stormwater design is required, stormwater systems shall meet the standards set forth in 15A NCAC 02H.1003(3) and be designed to control and treat the volume of runoff generated from all built upon area by one inch of rainfall or equivalent

- runoff volume in one or more Primary SCMs. Projects may use offsite Primary SCMs dedicated to treating an area encompassing the project.
- K. Where high density stormwater design is not required, stormwater systems shall meet the low-density design standards set forth in 15A NCAC 02H.1003(2).
- L. Projects may reduce the export of nitrogen loading rate generated from the project through a combination of engineered stormwater runoff controls that treat the site, by an approved offsite regional engineered stormwater control or through acquisition of permanent nutrient offset credits.
- M. Permanent nutrient offset credits shall be acquired prior to obtaining a building permit for the development. The Stormwater Program Administrator shall issue an approval letter for the development that documents the needed nitrogen credits for the development. All permanent nutrient offset credits permitted by this ordinance shall meet the requirements of 15A NCAC 02B.0703. These permanent nutrient credits may be obtained through a private mitigation bank or through payment into the Riparian Buffer Restoration Fund established in N.C.G.S. 143-214.26.
- N. Except in certain situations, stormwater detention will be required on new development. The design standard for detention will be based upon peak flow reduction to predevelopment (existing) conditions for the 1-, 10-, 25-, and in some cases, the 100-year return frequency storm events.

Section Two. That Article 7. "Enforcement" be amended to add a new section to read as follows:

7.6. SPECIAL ENFORCEMENT OF STORMWATER REGULATIONS

7.6.1. Complaints Regarding Violations.

The Engineering Department may investigate violations of Section 11.2 of this UDO on its own initiative or upon receipt of complaints (oral, written, or otherwise).

7.6.2. Procedures upon Discovery of Violations

- A. If any provision of Section 11.2 is being violated, a written notice of violation shall be issued indicating the nature of the violation, ordering the action necessary to correct it, associated deadlines and penalties, and advising that the order may be appealed to the BOA, pursuant to G.S. §160D-405.
- B. If the property owner or responsible entity does not appeal and fails to correct the violation or if the property owner or responsible entity fails to correct the violation after a final BOA decision upholding the notice of violation, the property owner or responsible entity shall be subject to such remedies and penalties as authorized in Section 7.6.3.

7.6.3. Penalties for Violation

- A. Persons Liable. The owner, tenant, or occupant of any building, land, or part thereof and any architect, builder, contractor, agent, or other person who participates in, assists, directs, creates, or maintains any situation contrary to the requirements of Section 11.2 is a responsible entity and may be held responsible for the violation, suffer the penalties, and be subject to the remedies herein provided.
- B. Violation or failure to comply with any of the provisions or requirements of Section 11.2 shall subject the offender to a civil penalty of \$100.00 per violation. If the offender fails to pay the civil penalty within 10 days after being issued the civil penalty, the penalty may be recovered by the Town in a civil action in the nature of debt.
- C. Each day a violation continues shall be considered a separate offense.
- D. Section 11.2 may also be enforced by any appropriate equitable action in addition to permit revocation pursuant to Section 7.3.3 or a stop work order pursuant to Section 7.3.4 of this UDO or as a nuisance pursuant to Article II of Chapter 6 of the Town Code of Ordinances. Any one, all, or any combination of penalties and remedies may be used to enforce Section 11.2.

Section Three. That all ordinances or portions thereof in conflict with this ordinance are hereby repealed.

Duly adopted this 4th day of April 2023.

Ken Marshburn, Mayor

ATTEST: Stella Gibson, Town Clerk

APPROVED AS TO FORM: ____

Terri Jones, Town Attorney

APPENDIX D

Neuse River Riparian Buffer Rules

1 2	15A NC	CAC 2B	.0233 has been adopted as published in 14:4 NCR 287-301 as follows:
3	.0233	NEU	SE RIVER BASIN: NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY:
4		PRO	TECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS
5	The fo	ollowing	g is the management strategy for maintaining and protecting existing riparian buffers in the Neuse
6	River Ba	asin.	
7	(1)	PURI	POSE. The purpose of this Rule shall be to protect and preserve existing riparian buffers in the
8		Neus	e River Basin to maintain their nutrient removal functions.
9	(2)	DEFI	NITIONS. For the purpose of this Rule, these terms shall be defined as follows:
10		(a)	'Channel' means a natural water-carrying trough cut vertically into low areas of the land surface by
11			erosive action of concentrated flowing water or a ditch or canal excavated for the flow of water.
12			(current definition in Forest Practice Guidelines Related to Water Quality, 15A NCAC 1I .0102)
13		(b)	'DBH' means Diameter at Breast Height of a tree, which is measured at 4.5 feet above ground
14			surface level.
15		(c)	'Ditch or canal' means a man-made channel other than a modified natural stream constructed for
16			drainage purposes that is typically dug through inter-stream divide areas. A ditch or canal may have
17			flows that are perennial, intermittent, or ephemeral and may exhibit hydrological and biological
18			characteristics similar to perennial or intermittent streams.
19		(d)	'Ephemeral (stormwater) stream' means a feature that carries only stormwater in direct response to
20			precipitation with water flowing only during and shortly after large precipitation events. An
21			ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the
22			water table, and stormwater runoff is the primary source of water. An ephemeral stream typically
23			lacks the biological, hydrological, and physical characteristics commonly associated with the
24			continuous or intermittent conveyance of water.
25		(e)	'Forest plantation' means an area of planted trees that may be conifers (pines) or hardwoods. On a
26			plantation, the intended crop trees are planted rather than naturally regenerated from seed on the
27			site, coppice (sprouting), or seed that is blown or carried into the site.
28		(f)	'High Value Tree' means a tree that meets or exceeds the following standards: for pine species, 14-
29			inch DBH or greater or 18-inch or greater stump diameter; and, for hardwoods and wetland species,
30			16-inch DBH or greater or 24-inch or greater stump diameter.
31		(g)	'Intermittent stream' means a well-defined channel that contains water for only part of the year,
32			typically during winter and spring when the aquatic bed is below the water table. The flow may be
33			heavily supplemented by stormwater runoff. An intermittent stream often lacks the biological and
34			hydrological characteristics commonly associated with the conveyance of water.
35		(h)	'Modified natural stream' means an on-site channelization or relocation of a stream channel and

- subsequent relocation of the intermittent or perennial flow as evidenced by topographic alterations in the immediate watershed. A modified natural stream must have the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water. 'Perennial stream' means a well-defined channel that contains water year round during a year of (i) normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.
 - (j) 'Perennial waterbody' means a natural or man-made basin that stores surface water permanently at depths sufficient to preclude growth of rooted plants, including lakes, ponds, sounds, non-stream estuaries and ocean. For the purpose of the State's riparian buffer protection program, the waterbody must be part of a natural drainageway (i.e., connected by surface flow to a stream).
 - (k) 'Stream' means a body of concentrated flowing water in a natural low area or natural channel on the land surface.
 - (1) 'Surface water' means all waters of the state as defined in G.S. 143-212 except underground waters.
 - (m) 'Tree' means a woody plant with a DBH equal to or exceeding five inches.

- (3) APPLICABILITY. This Rule shall apply to 50-foot wide riparian buffers directly adjacent to surface waters in the Neuse River Basin (intermittent streams, perennial streams, lakes, ponds, and estuaries), excluding wetlands. Except as described in Sub-Item (4)(a)(iii) of this Rule, wetlands adjacent to surface waters or within 50 feet of surface waters shall be considered as part of the riparian buffer but are regulated pursuant to 15A NCAC 2H .0506. The riparian buffers protected by this Rule shall be measured pursuant to Item (4) of this Rule. For the purpose of this Rule, a surface water shall be present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). Riparian buffers adjacent to surface waters that do not appear on either of the maps shall not be subject to this Rule. Riparian buffers adjacent to surface waters that appear on the maps shall be subject to this Rule unless one of the following applies.
 - (a) EXEMPTION WHEN AN ON-SITE DETERMINATION SHOWS THAT SURFACE WATERS
 ARE NOT PRESENT. When a landowner or other affected party believes that the maps have
 inaccurately depicted surface waters, he or she shall consult the Division or the appropriate
 delegated local authority. Upon request, the Division or delegated local authority shall make on-site
 determinations. Any disputes over on-site determinations shall be referred to the Director in writing.
 A determination of the Director as to the accuracy or application of the maps is subject to review as

1			provi	ded in	Articles 3 and 4 of G. S. 150B. Surface waters that appear on the maps shall not be
2			subje	ct to th	is Rule if an on-site determination shows that they fall into one of the following
3			categ	ories.	
4			(i)	Ditch	es and manmade conveyances other than modified natural streams unless constructed
5				for na	ivigation or boat access.
6			(ii)	Mann	nade ponds and lakes that are located outside natural drainage ways.
7			(iii)	Epher	meral (stormwater) streams.
8		(b)	EXE	MPTIC	ON WHEN EXISTING USES ARE PRESENT AND ONGOING. This Rule shall not
9			apply	to por	tions of the riparian buffer where a use is existing and ongoing according to the
10			follov	ving:	
11			(i)	A use	shall be considered existing if it was present within the riparian buffer as of July 22,
12				1997.	Existing uses shall include, but not be limited to, agriculture, buildings, industrial
13				facilit	ties, commercial areas, transportation facilities, maintained lawns, utility lines and on-
14				site sa	anitary sewage systems. Only the portion of the riparian buffer that contains the
15				footp	rint of the existing use is exempt from this Rule. Activities necessary to maintain uses
16				are al	lowed provided that no additional vegetation is removed from Zone 1 except that
17				graze	d or trampled by livestock and existing diffuse flow is maintained. Grading and
18				reveg	etating Zone 2 is allowed provided that the health of the vegetation in Zone 1 is not
19				comp	romised, the ground is stabilized and existing diffuse flow is maintained.
20			(ii)	At the	e time an existing use is proposed to be converted to another use, this Rule shall apply.
21				An ex	cisting use shall be considered to be converted to another use if any of the following
22				applie	es:
23				(A)	Impervious surface is added to the riparian buffer in locations where it did not exist
24					previously.
25				(B)	An agricultural operation within the riparian buffer is converted to a non-agricultural
26					use.
27				(C)	A lawn within the riparian buffer ceases to be maintained.
28	(4)	ZON	ES OF	THE F	RIPARIAN BUFFER. The protected riparian buffer shall have two zones as follows:
29		(a)	Zone	1 shall	consist of a vegetated area that is undisturbed except for uses provided for in Item (6)
30			of thi	s Rule.	The location of Zone 1 shall be as follows:
31			(i)	For ir	ntermittent and perennial streams, Zone 1 shall begin at the most landward limit of the
32				top of	f bank or the rooted herbaceous vegetation and extend landward a distance of 30 feet on
33				all sic	les of the surface water, measured horizontally on a line perpendicular to the surface
34				water	•
35			(ii)	For p	onds, lakes and reservoirs located within a natural drainage way, Zone 1 shall begin at

1			the most landward limit of the normal water level or the rooted herbaceous vegetation and
2			extend landward a distance of 30 feet, measured horizontally on a line perpendicular to the
3			surface water.
4			(iii) For surface waters within the 20 Coastal Counties (defined in 15A NCAC 2B .0202) within
5			the jurisdiction of the Division of Coastal Management, Zone 1 shall begin at the most
6			landward limit of the following options, whichever is more restrictive, and extend landward a
7			distance of 30 feet, measured horizontally on a line perpendicular to the surface water:
8			(A) the normal high water level;
9			(B) the normal water level; or
10			(C) the landward limit of coastal wetlands as defined by the Division of Coastal
11			Management.
12		(b)	Zone 2 shall consist of a stable, vegetated area that is undisturbed except for activities and uses
13			provided for in Item (6) of this Rule. Grading and revegetating Zone 2 is allowed provided that the
14			health of the vegetation in Zone 1 is not compromised. Zone 2 shall begin at the outer edge of Zone
15			1 and extend landward 20 feet as measured horizontally on a line perpendicular to the surface water.
16			The combined width of Zones 1 and 2 shall be 50 feet on all sides of the surface water.
17	(5)	DIFF	USE FLOW REQUIREMENT. Diffuse flow of runoff shall be maintained in the riparian buffer by
18		dispe	rsing concentrated flow and reestablishing vegetation.
19		(a)	Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow
20			before the runoff enters Zone 2 of the riparian buffer.
21		(b)	Periodic corrective action to restore diffuse flow shall be taken if necessary to impede the formation
22			of erosion gullies.
23			

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	Exempt	Allowable	Allowable with Mitigation	Prohibited
Airport facilities:				
• Airport facilities that impact equal to or less than 150		X		
linear feet or one-third of an acre of riparian buffer				
• Airport facilities that impact greater than 150 linear feet			X	
or one-third of an acre of riparian buffer				
Archaeological activities	X			
Bridges		X		
Dam maintenance activities	X			

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Drainage ditches, roadside ditches and stormwater outfalls				
through riparian buffers:				
Existing drainage ditches, roadside ditches, and	X			
stormwater outfalls provided that they are managed to				
minimize the sediment, nutrients and other pollution that				
convey to waterbodies				
New drainage ditches, roadside ditches and stormwater		X		
outfalls provided that a stormwater management facility is				
installed to control nitrogen and attenuate flow before the				
conveyance discharges through the riparian buffer				
New drainage ditches, roadside ditches and stormwater				X
outfalls that do not provide control for nitrogen before				
discharging through the riparian buffer				
Excavation of the streambed in order to bring it to the				X
same elevation as the invert of a ditch				
Drainage of a pond in a natural drainage way provided that	X			
a new riparian buffer that meets the requirements of Items	11			
(4) and (5) of this Rule is established adjacent to the new				
Driveway crossings of streams and other surface waters				
subject to this Rule:				
Driveway crossings on single family residential lots that	X			
disturb equal to or less than 25 linear feet or 2,500 square				
feet of riparian buffer				
Driveway crossings on single family residential lots that				
disturb greater than 25 linear feet or 2,500 square feet of		X		
riparian buffer				
• In a subdivision that cumulatively disturb equal to or less		X		
than 150 linear feet or one-third of an acre of riparian				
buffer				
In a subdivision that cumulatively disturb greater than			X	
150 linear feet or one-third of an acre of riparian buffer			Λ	

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Fences provided that disturbance is minimized and installation does not result in removal of forest vegetation	X			
Forest harvesting - see Item (11) of this Rule				
Fertilizer application: • One-time fertilizer application to establish replanted vegetation • Ongoing fertilizer application	X			X
Grading and revegetation in Zone 2 only provided that diffuse flow and the health of existing vegetation in Zone 1 is not compromised and disturbed areas are stabilized	X			
Greenway / hiking trails		X		
Historic preservation	X			
Landfills as defined by G.S. 130A-290.				X
Mining activities: • Mining activities that are covered by the Mining Act provided that new riparian buffers that meet the requirements of Items (4) and (5) of this Rule are established adjacent to the relocated channels • Mining activities that are not covered by the Mining Act OR where new riparian buffers that meet the requirements or Items (4) and (5) of this Rule are not established adjacent to the relocated channels • Wastewater or mining dewatering wells with approved.	Y	X	X	
 Wastewater or mining dewatering wells with approved NPDES permit 	X			

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Non-electric utility lines:				
• Impacts other than perpendicular crossings in Zone 2		X		
only ³			X	
• Impacts other than perpendicular crossings in Zone 1 ³				
Non-electric utility line perpendicular crossings of streams				
and other surface waters subject to this Rule ³ :				
• Perpendicular crossings that disturb equal to or less than	X			
40 linear feet of riparian buffer with a maintenance corridor				
equal to or less than 10 feet in width				
• Perpendicular crossings that disturb equal to or less than		<u>X</u>		
40 linear feet of riparian buffer with a maintenance corridor				
greater than 10 feet in width				
• Perpendicular crossings that disturb greater than 40		v		
linear feet but equal to or less than 150 linear feet of		X		
riparian buffer with a maintenance corridor equal to or less				
than 10 feet in width				
• Perpendicular crossings that disturb greater than 40			X	
linear feet but equal to or less than 150 linear feet of			Λ	
riparian buffer with a maintenance corridor greater than 10				
feet in width				
• Perpendicular crossings that disturb greater than 150			X	
linear feet of riparian buffer				
On-site sanitary sewage systems - new ones that use ground				X
absorption				
Overhead electric utility lines:				
• Impacts other than perpendicular crossings in Zone 2	X			
only ³				
• Impacts other than perpendicular crossings in Zone 1 ^{1,2,3}	X			

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Overhead electric utility line perpendicular crossings of streams and other surface waters subject to this Rule ³ : • Perpendicular crossings that disturb equal to or less than 150 linear feet of riparian buffer ¹ • Perpendicular crossings that disturb greater than 150 linear feet of riparian buffer ^{1, 2}	X	X		
Periodic maintenance of modified natural streams such as canals and a grassed travelway on one side of the surface water when alternative forms of maintenance access are not practical		X		

- 1 Provided that, in Zone 1, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the Division.
- A minimum zone of 10 feet wide immediately adjacent to the water body shall be managed such that only
 vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed.
- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain where trees
 are cut.
- Rip rap shall not be used unless it is necessary to stabilize a tower.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.
- ² Provided that poles or towers shall not be installed within 10 feet of a water body unless the Division completes a
 no practical alternative evaluation.
- 17 Perpendicular crossings are those that intersect the surface water at an angle between 75° and 105°.

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Playground equipment: • Playground equipment on single family lots provided that installation and use does not result in removal of vegetation • Playground equipment installed on lands other than	X	X		
single-family lots or that requires removal of vegetation				
Ponds in natural drainage ways, excluding dry ponds: • New ponds provided that a riparian buffer that meets the requirements of Items (4) and (5) of this Rule is established adjacent to the pond		X		
• New ponds where a riparian buffer that meets the requirements of Items (4) and (5) of this Rule is NOT established adjacent to the pond			X	
Protection of existing structures, facilities and streambanks when this requires additional disturbance of the riparian buffer or the stream channel		X		
Railroad impacts other than crossings of streams and other surface waters subject to this Rule			<u>X</u>	
Railroad crossings of streams and other surface waters subject to this Rule: • Railroad crossings that impact equal to or less than 40 linear feet of riparian buffer • Railroad crossings that impact greater than 40 linear feet but_equal to or less than 150 linear feet or one-third of an ages of riparian buffer.	X	X		
 acre of riparian buffer Railroad crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer 			X	

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Removal of previous fill or debris provided that diffuse	X			
flow is maintained and any vegetation removed is restored				
Road impacts other than crossings of streams and other				
surface waters subject to this Rule			X	
Road crossings of streams and other surface waters subject				
to this Rule:				
• Road crossings that impact equal to or less than 40 linear	X			
feet of riparian buffer				
• Road crossings that impact greater than 40 linear feet but		X		
equal to or less than 150 linear feet or one-third of an acre				
of riparian buffer				
• Road crossings that impact greater than 150 linear feet or			X	
one-third of an acre of riparian buffer				
Scientific studies and stream gauging	X			
Stormwater management ponds excluding dry ponds:				
New stormwater management ponds provided that a		X		
riparian buffer that meets the requirements of Items (4) and				
(5) of this Rule is established adjacent to the pond				
New stormwater management ponds where a riparian			X	
buffer that meets the requirements of Items (4) and (5) of				
this Rule is NOT established adjacent to the pond				
Stream restoration	X			
Streambank stabilization		X		

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Temporary roads:				
Temporary roads that disturb less than or equal to 2,500	X			
square feet provided that vegetation is restored within six				
months of initial disturbance				
Temporary roads that disturb greater than 2,500 square		X		
feet provided that vegetation is restored within six months				
of initial disturbance				
Temporary roads used for bridge construction or		X		
replacement provided that restoration activities, such as				
soil stabilization and revegetation, are conducted				
immediately after construction				
Temporary sediment and erosion control devices:				
• In Zone 2 only provided that the vegetation in Zone 1 is	X			
not compromised and that discharge is released as diffuse				
flow in accordance with Item (5) of this Rule				
In Zones 1 and 2 to control impacts associated with uses		***		
approved by the Division or that have received a variance		X		
provided that sediment and erosion control for upland areas				
is addressed to the maximum extent practical outside the				
buffer				
In-stream temporary erosion and sediment control	X			
measures for work within a stream channel				
Underground electric utility lines:				
• Impacts other than perpendicular crossings in Zone 2	X			
only ³				
• Impacts other than perpendicular crossings in Zone 1 ^{3, 4}	X			

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Underground electric utility line perpendicular crossings of				
streams and other surface waters subject to this Rule: ³				
 Perpendicular crossings that disturb less than or equal to 40 linear feet of riparian buffer ⁴ 	X			
Perpendicular crossings that disturb greater than 40		X		
linear feet of riparian buffer ⁴				

- 2 ⁴ Provided that, in Zone 1, all of the following BMPs for underground utility lines are used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the Division.
- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the
- 6 trench, where trees are cut.

- 7 Underground cables shall be installed by vibratory plow or trenching.
- 8 The trench shall be backfilled with the excavated soil material immediately following cable installation.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the
- 11 time in which areas remain in a disturbed state.
- Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of
- 13 stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

	Exempt	Allowable	Allowable with Mitigation	Prohibited
Vegetation management:				
• Emergency fire control measures provided that	X			
topography is restored				
Periodic mowing and harvesting of plant products in	X			
Zone 2 only				
• Planting vegetation to enhance the riparian buffer	X			
• Pruning forest vegetation provided that the health and				
function of the forest vegetation is not compromised	X			
• Removal of individual trees which are in danger of				
causing damage to dwellings, other structures or human life	X			
• Removal of poison ivy	X			
• Removal of understory nuisance vegetation as defined in:				
Smith, Cherri L. 1998. Exotic Plant Guidelines.	X			
Department of Environment and Natural Resources.				
Division of Parks and Recreation. Raleigh, NC. Guideline				
#30				
Water dependent structures as defined in 15A NCAC 2B .0202		X		
Water supply reservoirs:				
• New reservoirs provided that a riparian buffer that meets		X		
the requirements of Items (4) and (5) of this Rule is				
established adjacent to the reservoir				
• New reservoirs where a riparian buffer that meets the			X	
requirements of Items (4) and (5) of this Rule is NOT				
established adjacent to the reservoir				
Water wells	X			
Wetland restoration	X			

⁽⁷⁾ REQUIREMENTS FOR CATEGORIES OF USES. Uses designated as exempt, allowable, allowable

1 with mitigation and prohibited in Item (6) of this Rule shall have the following requirements: 2 EXEMPT. Uses designated as exempt are allowed within the riparian buffer. Exempt uses shall be (a) 3 designed, constructed and maintained to minimize soil disturbance and to provide the maximum 4 water quality protection practicable. In addition, exempt uses shall meet requirements listed in Item 5 (6) of this Rule for the specific use. 6 (b) ALLOWABLE. Uses designated as allowable may proceed within the riparian buffer provided that 7 there are no practical alternatives to the requested use pursuant to Item (8) of this Rule. These uses 8 require written authorization from the Division or the delegated local authority. 9 ALLOWABLE WITH MITIGATION. Uses designated as allowable with mitigation may proceed (c) 10 within the riparian buffer provided that there are no practical alternatives to the requested use 11 pursuant to Item (8) of this Rule and an appropriate mitigation strategy has been approved pursuant 12 to Item (10) of this Rule. These uses require written authorization from the Division or the 13 delegated local authority. 14 PROHIBITED. Uses designated as prohibited may not proceed within the riparian buffer unless a (d) 15 variance is granted pursuant to Item (9) of this Rule. Mitigation may be required as one condition 16 of a variance approval. 17 (8) DETERMINATION OF "NO PRACTICAL ALTERNATIVES." Persons who wish to undertake uses 18 designated as allowable or allowable with mitigation shall submit a request for a "no practical alternatives" 19 determination to the Division or to the delegated local authority. The applicant shall certify that the 20 criteria identified in Sub-Item (8)(a) of this Rule are met. The Division or the delegated local authority 21 shall grant an Authorization Certificate upon a "no practical alternatives" determination. The procedure 22 for making an Authorization Certificate shall be as follows: 23 For any request for an Authorization Certificate, the Division or the delegated local authority shall (a) 24 review the entire project and make a finding of fact as to whether the following requirements have 25 been met in support of a "no practical alternatives" determination: 26 The basic project purpose cannot be practically accomplished in a manner that would better 27 minimize disturbance, preserve aquatic life and habitat, and protect water quality. 28 The use cannot practically be reduced in size or density, reconfigured or redesigned to better 29 minimize disturbance, preserve aquatic life and habitat, and protect water quality. 30 (iii) Best management practices shall be used if necessary to minimize disturbance, preserve 31 aquatic life and habitat, and protect water quality. 32 (b) Requests for an Authorization Certificate shall be reviewed and either approved or denied within 60

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days of receipt of a complete submission based on the criteria in Sub-Item (8)(a) of this Rule by

either the Division or the delegated local authority. Failure to issue an approval or denial within 60

days shall constitute that the applicant has demonstrated "no practical alternatives." The Division

1			or the	e deleg	ated local authority may attach conditions to the Authorization Certificate that support
2			the p	urpose	, spirit and intent of the riparian buffer protection program. Complete submissions shall
3			inclu	de the	following:
4			(i)	The i	name, address and phone number of the applicant;
5			(ii)	The i	nature of the activity to be conducted by the applicant;
6			(iii)	The l	ocation of the activity, including the jurisdiction;
7			(iv)	A ma	up of sufficient detail to accurately delineate the boundaries of the land to be utilized in
8				carry	ing out the activity, the location and dimensions of any disturbance in riparian buffers
9				assoc	ciated with the activity, and the extent of riparian buffers on the land;
10			(v)	An e	xplanation of why this plan for the activity cannot be practically accomplished, reduced
11				or re	configured to better minimize disturbance to the riparian buffer, preserve aquatic life
12				and h	nabitat and protect water quality; and
13			(vi)	Plans	s for any best management practices proposed to be used to control the impacts
14				assoc	ciated with the activity.
15		(c)	Any	dispute	es over determinations regarding Authorization Certificates shall be referred to the
16			Direc	ctor for	a decision. The Director's decision is subject to review as provided in Articles 3 and 4
17			of G	. S. 150)B.
18	(9)	VAR	IANC	ES. Pe	ersons who wish to undertake uses designated as prohibited may pursue a variance. The
19		Divis	sion or	the app	propriate delegated local authority may grant minor variances. The variance request
20		proce	edure s	hall be	as follows:
21		(a)	For a	any var	iance request, the Division or the delegated local authority shall make a finding of fact
22			as to	whethe	er the following requirements have been met:
23			(i)	Ther	e are practical difficulties or unnecessary hardships that prevent compliance with the
24				strict	letter of the riparian buffer protection requirements. Practical difficulties or
25				unne	cessary hardships shall be evaluated in accordance with the following:
26				(A)	If the applicant complies with the provisions of this Rule, he/she can secure no
27					reasonable return from, nor make reasonable use of, his/her property. Merely proving
28					that the variance would permit a greater profit from the property shall not be
29					considered adequate justification for a variance. Moreover, the Division or delegated
30					local authority shall consider whether the variance is the minimum possible deviation
31					from the terms of this Rule that shall make reasonable use of the property possible.
32				(B)	The hardship results from application of this Rule to the property rather than from
33					other factors such as deed restrictions or other hardship.
34				(C)	The hardship is due to the physical nature of the applicant's property, such as its size,

shape, or topography, which is different from that of neighboring property.

1 (D) The applicant did not cause the hardship by knowingly or unknowingly violating this 2 Rule. 3 (E) The applicant did not purchase the property after the effective date of this Rule, and 4 then requesting an appeal. 5 (F) The hardship is unique to the applicant's property, rather than the result of conditions 6 that are widespread. If other properties are equally subject to the hardship created in 7 the restriction, then granting a variance would be a special privilege denied to others, 8 and would not promote equal justice. 9 (ii) The variance is in harmony with the general purpose and intent of the State's riparian buffer 10 protection requirements and preserves its spirit; and 11 (iii) In granting the variance, the public safety and welfare have been assured, water quality has 12 been protected, and substantial justice has been done. 13 (b) MINOR VARIANCES. A minor variance request pertains to activities that are proposed only to 14 impact any portion of Zone 2 of the riparian buffer. Minor variance requests shall be reviewed and 15 approved based on the criteria in Sub-Item (9)(a) of this Rule by the either the Division or the 16 delegated local authority pursuant to G.S. 153A-Article 18, or G.S. 160A-Article 19. The Division 17 or the delegated local authority may attach conditions to the variance approval that support the 18 purpose, spirit and intent of the riparian buffer protection program. Requests for appeals of 19 decisions made by the Division shall be made to the Office of Administrative Hearings. Request for 20 appeals made by the delegated local authority shall be made to the appropriate Board of Adjustment 21 under G.S. 160A-388 or G.S. 153A-345. 22 (c) MAJOR VARIANCES. A major variance request pertains to activities that are proposed to impact 23 any portion of Zone 1 or any portion of both Zones 1 and 2 of the riparian buffer. If the Division or 24 the delegated local authority has determined that a major variance request meets the requirements in 25 Sub-Item (9)(a) of this Rule, then it shall prepare a preliminary finding and submit it to the 26 Commission. Preliminary findings on major variance requests shall be reviewed by the 27 Commission within 90 days after receipt by the Director. Requests for appeals of determinations 28 that the requirements of Sub-Item (9)(a) of this Rule have not been met shall be made to the Office 29 of Administrative Hearings for determinations made by the Division or the appropriate Board of 30 Adjustments under G.S. 160A-388 or G.S. 153A-345 for determinations made by the delegated 31 local authority. The purpose of the Commission's review is to determine if it agrees that the 32 requirements in Sub-Item (9)(a) of this Rule have been met. Requests for appeals of decisions made 33 by the Commission shall be made to the Office of Administrative Hearings. The following actions 34 shall be taken depending on the Commission's decision on the major variance request:

35

Upon the Commission's approval, the Division or the delegated local authority shall issue a

1			final decision granting the major variance.
2		(ii)	Upon the Commission's approval with conditions or stipulations, the Division or the
3			delegated local authority shall issue a final decision, which includes these conditions or
4			stipulations.
5		(iii)	Upon the Commission's denial, the Division or the delegated local authority shall issue a
6			final decision denying the major variance.
7	(10)	MITIGATI	ON. Persons who wish to undertake uses designated as allowable with mitigation shall meet the
8		following re	equirements in order to proceed with their proposed use.
9		(a) Obta	in a determination of "no practical alternatives" to the proposed use pursuant to Item (8) of this
10		Rule	
11		(b) Obta	in approval for a mitigation proposal pursuant to 15A NCAC 2B .0242.
12	(11)	REQUIREN	MENTS SPECIFIC TO FOREST HARVESTING. The following requirements shall apply for
13		forest harve	esting operations and practices.
14		(a) The f	following measures shall apply in the entire riparian buffer:
15		(i)	Logging decks and sawmill sites shall not be placed in the riparian buffer.
16		(ii)	Access roads and skid trails shall be prohibited except for temporary and permanent stream
17			crossings established in accordance with 15A NCAC 1I .0203. Temporary stream crossings
18			shall be permanently stabilized after any site disturbing activity is completed.
19		(iii)	Timber felling shall be directed away from the stream or water body.
20		(iv)	Skidding shall be directed away from the stream or water body and shall be done in a manner
21			that minimizes soil disturbance and prevents the creation of channels or ruts.
22		(v)	Individual trees may be treated to maintain or improve their health, form or vigor.
23		(vi)	Harvesting of dead or infected trees or application of pesticides necessary to prevent or
24			control extensive tree pest and disease infestation shall be allowed. These practices must be
25			approved by the Division of Forest Resources for a specific site. The Division of Forest
26			Resources must notify the Division of all approvals.
27		(vii)	Removal of individual trees that are in danger of causing damage to structures or human life
28			shall be allowed.
29		(viii)	Natural regeneration of forest vegetation and planting of trees, shrubs, or ground cover plants
30			to enhance the riparian buffer shall be allowed provided that soil disturbance is minimized.
31			Plantings shall consist primarily of native species.
32		(ix)	High intensity prescribed burns shall not be allowed.
33		(x)	Application of fertilizer shall not be allowed except as necessary for permanent stabilization.
34			Broadcast application of fertilizer or herbicides to the adjacent forest stand shall be
35			conducted so that the chemicals are not applied directly to or allowed to drift into the riparian

1		buffer.
2		(b) In Zone 1, forest vegetation shall be protected and maintained. Selective harvest as provided for
3		below is allowed on forest lands that have a deferment for use value under forestry in accordance
4		with G.S. 105-277.2 through 277.6 or on forest lands that have a forest management plan prepared
5		or approved by a registered professional forester. Copies of either the approval of the deferment f
6		use value under forestry or the forest management plan shall be produced upon request. For such
7		forest lands, selective harvest is allowed in accordance with the following:
8		(i) Tracked or wheeled vehicles are not permitted except at stream crossings designed,
9		constructed and maintained in accordance with 15A NCAC 1I .0203.
10		(ii) Soil disturbing site preparation activities are not allowed.
11		(iii) Trees shall be removed with the minimum disturbance to the soil and residual vegetation.
12		(iv) The following provisions for selective harvesting shall be met:
13		(A) The first 10 feet of Zone 1 directly adjacent to the stream or waterbody shall be
14		undisturbed except for the removal of individual high value trees as defined provided
15		that no trees with exposed primary roots visible in the streambank be cut.
16		(B) In the outer 20 feet of Zone 1, a maximum of 50 percent of the trees greater than five
17		inches dbh may be cut and removed. The reentry time for harvest shall be no more
18		frequent than every 15 years, except on forest plantations where the reentry time shall
19		be no more frequent than every five years. In either case, the trees remaining after
20		harvest shall be as evenly spaced as possible.
21		(C) In Zone 2, harvesting and regeneration of the forest stand shall be allowed provided
22		that sufficient ground cover is maintained to provide for diffusion and infiltration of
23		surface runoff.
24	(12)	REQUIREMENTS SPECIFIC TO LOCAL GOVERNMENTS WITH STORMWATER PROGRAMS
25		FOR NITROGEN CONTROL. Local governments that are required to have local stormwater programs
26		pursuant to 15A NCAC 2B .0235 shall have two options for ensuring protection of riparian buffers on ne
27		developments within their jurisdictions as follows.
28		(a) Obtain authority to implement a local riparian buffer protection program pursuant to 15A NCAC 2
29		.0241.
30		(b) Refrain from issuing local approvals for new development projects unless either:
31		(i) The person requesting the approval does not propose to impact the riparian buffer of a
32		surface water that appears on either the most recent versions of the soil survey maps prepare
33		by the Natural Resources Conservation Service of the United States Department of
34		Agriculture or the most recent versions of the 1:24,000 scale (7.5 minute quadrangle)
35		topographic maps prepared by the United States Geologic Survey (USGS).

1		(II) The p	berson requesting the approval proposes to impact the ripartan burier of a surface water
2		that a	ppears on the maps described in Sub-Item (12)(b)(i) of this Rule and either:
3		(A)	Has received an on-site determination from the Division pursuant to Sub-Item (3)(a)
4			of this Rule that surface waters are not present;
5		(B)	Has received an Authorization Certificate from the Division pursuant to Item (8) of
6			this Rule for uses designated as Allowable under this Rule;
7		(C)	Has received an Authorization Certificate from the Division pursuant to Item (8) of
8			this Rule and obtained the Division's approval on a mitigation plan pursuant to Item
9			(10) of this Rule for uses designated as Allowable with Mitigation under this Rule; or
10		(D)	Has received a variance from the Commission pursuant to Item (9) of this Rule.
11	(13) OTHI	ER LAWS, R	EGULATIONS AND PERMITS. In all cases, compliance with this Rule does not
12	preclu	ide the requir	rement to comply with all federal, state and local regulations and laws.
13			
14	History Note:	Authority I	143-214.1; 143-214.7; 143-215.3(a)(1); S. L. 1995, c. 572;
15		Temporary	Adoption Eff. July 22, 1997;
16		Temporary	Amendment Eff. June 22, 1999; April 22, 1998; January 22, 1998;
17		Eff. August	e 1, 2000.

APPENDIX E

Legal Authority for Illicit Discharges and Connections

ARTICLE VI. STORMWATER DISCHARGE

Sec. 17-90. Stormwater discharge.

This article shall be known and may be cited as the Town of Garner's "Illicit Discharge Ordinance."

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-91. Purposes.

- (a) This article is adopted for the purposes of:
 - (1) Protecting the public health, safety and welfare by controlling the discharge of pollutants into the stormwater conveyance system;
 - (2) Promoting activities directed toward the maintenance and improvement of surface and groundwater quality;
 - (3) Satisfying the requirements imposed upon the town by the North Carolina Division of Water Quality in order to conform with the Neuse under its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) discharge permit issued by the state; and
 - (4) Establishing administration and enforcement procedures through which these purposes can be fulfilled.
- (b) The provisions of this regulation are supplemental to regulations administered by federal and state governments.

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-92. Acronyms.

DEHNR: North Carolina Department of Environment Health and Natural Resources.

DEM: North Carolina Division of Environmental Management.

MS4: Municipal separate storm sewer system.

NPDES: National Pollutant Discharge Elimination System.

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-93. Definitions.

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

Federal law reference. National pollutant discharge elimination system permits, 33 USC § 1342.

Illicit connection. Any unlawful connection which allows the discharge of non-stormwater to the stormwater conveyance system or waters of the state in violation of this article.

Illicit discharge. Any unlawful disposal, placement, emptying, dumping, spillage, leakage, pumping, pouring, emission, or other discharge of any substance other than stormwater into a stormwater conveyance, the waters of the state, or upon the land in such proximity to the same, such that the substance is likely to reach a stormwater conveyance or the waters of the state.

Municipal separate storm sewer system (MS4). A stormwater conveyance or unified stormwater conveyance system (including without limitation: roads with drainage systems, municipal streets, catch basins, stormwater detention facilities, curbs, gutters, ditches, natural or man-made channels, or storm drains), that:

- (1) Is located within the corporate limits of Garner, North Carolina; and
- (2) Is owned or operated by the state, county, the town, or other public body; and
- (3) Discharges to waters of the state, excluding publicly owned treatment works, and lawful connections thereto, which in turn discharge into the waters of the state.

National pollutant discharge elimination system. A permitting system established pursuant to § 402 of the Clean Water Act et seq.

Pollution. Man-made or man-induced alteration of the chemical, physical, biological, thermal, and/or radiological integrity of water.

Stormwater. Any flow resulting from, and occurring during or following, any form of natural precipitation.

Stormwater conveyance or stormwater conveyance system. Any feature, natural or man-made, that collects and transports stormwater, including but not limited to roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made and natural channels, pipes, culverts, and storm drains, and any other natural or man-made feature or structure designed or used for collecting or conveying stormwater.

Waters of the state. Surface waters within or flowing through the boundaries of the state including the following: any intermittent or perennial stream, river, creek, brook, swamp, lake, sound, tidal estuary, bay, reservoir, wetland, or any other surface water or any portion thereof that is mapped as solid or dashed blue lines on United States Department of the Interior Geological Survey 7.5 minute series topographic maps. Treatment systems, consisting of man-made bodies of water, which were not originally created in waters ofthe state and which are not the result of impoundment of waters of the state, are not waters of the state.

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-94. Scope and exclusions.

This article shall apply within the territorial jurisdiction of the town, with the following exclusions: federal, state, and local governments, including their agencies, unless intergovernmental agreements have been established giving the town enforcement authority.

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-95. Objectives.

The objectives of this article are to:

- (1) Regulate the discharge of substances which may contaminate or cause pollution of stormwater, stormwater conveyances, or waters of the state;
- (2) Regulate connections to the stormwater conveyance system;

- (3) Provide for the proper handling of spills; and
- (4) Provide for the enforcement of same.

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-96. Non-stormwater discharge controls.

- (a) *Illicit discharges*. No person shall cause or allow the discharge, emission, disposal, pouring, or pumping directly or indirectly to any stormwater conveyance, the waters of the state, or upon the land in such proximity to the same (such that the substance is likely to reach a stormwater conveyance or the waters of the state), any fluid, solid, gas, or other substance, other than stormwater; provided that non-stormwater discharges associated with the following activities are allowed provided that they do not significantly impact water quality:
 - Filter backwash and draining associated with swimming pools;
 - (2) Filter backwash and draining associated with raw water intake screening and filtering devices;
 - (3) Condensate from residential or commercial air conditioning;
 - (4) Residential vehicle washing;
 - (5) Flushing and hydrostatic testing water associated with utility distribution systems;
 - (6) Discharges associated with emergency removal and treatment activities, for hazardous materials, authorized by the federal, state, or local government on-scene coordinator;
 - (7) Uncontaminated groundwater [including the collection or pumping of springs, wells, or rising groundwater and groundwater generated by well construction or other construction activities];
 - (8) Collected infiltrated stormwater from foundation or footing drains;
 - (9) Collected groundwater and infiltrated stormwater from basement or crawl space pumps;
 - (10) Irrigation water;
 - (11) Street wash water;
 - (12) Flows from fire fighting;
 - (13) Discharges from the pumping or draining of natural watercourses or waterbodies;
 - (14 Flushing and cleaning of stormwater conveyances with unmodified potable water;
 - (15) Wash water from the cleaning of the exterior of buildings, including gutters, provided that the discharge does not pose an environmental or health threat; and
 - (16) Other non-stormwater discharges for which a valid NPDES discharge permit has been approved and issued by DEM, and provided that any such discharges to the municipal separate storm sewer system shall be authorized by the town.

Prohibited substances include but are not limited to: oil, antifreeze, chemicals, animal waste, paints, garbage, and litter.

- (b) Illicit connections.
 - (1) Connections to a stormwater conveyance or stormwater conveyance system which allow the discharge of non-stormwater, other than the exclusions described in

subsection (a) above, are unlawful. Prohibited connections include, but are not limited to: floor drains, wastewater from washing machines or sanitary sewers, washwater from commercial vehicle washing or steam cleaning, and wastewater from septic systems.

- (2) Where such connections exist in violation of this section and said connections were made prior to the adoption of this provision or any other ordinance prohibiting such connections, the property owner or the person using said connection shall remove the connection within one (1) year following application of this regulation; provided that, this grace period shall not apply to connections which may result in the discharge of hazardous materials or other discharges which pose an immediate threat to health andsafety, or are likely to result in immediate injury and harm to real or personal property, natural resources, wildlife, or habitat.
- (3) Where it is determined that said connection:
 - a. May result in the discharge of hazardous materials or may pose an immediate threat to health and safety, or is likely to result in immediate injury and harm to real or personal property, natural resources, wildlife, or habitat; or
 - b. Was made in violation of any applicable regulation or ordinance.

The town manager or his designee shall designate the time within which the connection shall be removed. In setting the time limit for compliance, the town shall take into consideration:

- a. The quantity and complexity of the work;
- b. The consequences of delay;
- c. The potential harm to the environment, to the public health, and to public and private property; and
- d. The cost of remedying the damage.

Permits are issued by the inspections department for connection to or modification of storm sewers located in town owned rights-of-way.

(c) Spills. Spills or leaks of polluting substances discharged to, or having the potential to be indirectly transported to the stormwater conveyance system, shall be contained, controlled, collected, and removed promptly. All affected areas shall be restored to their preexisting condition.

Persons associated with the spill or leak shall immediately notify the town fire chief or his designee of all spills or leaks of polluting substances. Notification shall not relieve any person of any expenses related to the restoration, loss, damage, or any other liability which may be incurred as a result of said spill or leak, nor shall such notification relieve any person from other liability which may be imposed by state or other law.

(Ord. No. 3007, § 2, 2-5-01)

Sec. 17-97. Enforcement.

- (a) Authority to enter. Any authorized town personnel shall be permitted to enter upon public or private property for the purposes of observation, inspection, sampling, monitoring, testing, surveying, and measuring compliance. Should the owner or occupant of any property refuse to permit such reasonable access, the town manager or his designee shall proceed to obtain an administrative search warrant pursuant to G.S. 15-27.2 or its successor. No person shall obstruct, hamper or interfere with any such representative while carryingout his official duties.
- (b) Civil penalties.
 - (1) Illicit discharges. Any designer, engineer, contractor, agent, or any other person

who allows, acts in concert, participates, directs, or assists directly or indirectly in the creation of a violation of this article shall be subject to civil penalties as follows:

- a. For first time offenders, if the quantity of the discharge is equal to or less than five (5) gallons and consists of domestic or household products in quantities considered ordinary for household purposes, said person shall be assessed a civil penalty not to exceed one hundred dollars (\$100.00) per violation or per day for any continuing violation, and if the quantity of the discharge is greater than five (5) gallons or contains non-domestic substances, including but not limited to process wastewater, or ifsaid person cannot provide clear and convincing evidence of the volume and nature of the substance discharged, said person shall be assessed a civil penalty not to exceed one thousand dollars (\$1,000.00) per violation or per day for any continuing violation.
- b. For repeat offenders, the amount of the penalty shall be double the amount assessed for the previous penalty, not to exceed ten thousand dollars (\$10,000.00) per violation or per day for any continuing violation.
- c. In determining the amount of the penalty, the town manager or his designee shall consider:
 - 1. The degree and extent of harm to the environment, the public health, and public and private property;
 - 2. The cost of remedying the damage;
 - 3. The duration of the violation:
 - 4. Whether the violation was willful:
 - 5. The prior record of the person responsible for the violation in complying or failing to comply with this article;
 - 6. The costs of enforcement to the public; and
 - 7. The amount of money saved by the violator through his, her, or its noncompliance.
- (2) *Illicit connections*. Any person found with an illicit connection in violation of this article and any designer, engineer, contractor, agent, or any other person who allows, acts in concert, participates, directs, or assists directly or indirectly in the establishment of an illicit connection in violation of this article, shall be subject to civil penalties as follows:
 - a. First time offenders shall be subject to a civil penalty not to exceed five hundred dollars (\$500.00) per day of continuing violation.
 - b. Repeat violators shall be subject to a civil penalty not to exceed one thousand dollars (\$1,000.00) per day of continuing violation.
 - c. In determining the amount of the penalty, the town manager or his designee shall consider:
 - 1. The degree and extent of harm to the environment, the public health, and public and private property;
 - 2. The cost of remedying the damage;
 - The duration of the violation;
 - 4. Whether the violation was willful:
 - 5. The prior record of the person responsible for the violation in complying or failing to comply with this article;

- 6. The costs of enforcement to the public; and
- 7. The amount of money saved by the violator through his, her, or its noncompliance.
- d. Procedures for assessing penalties pursuant to illicit connections. Said penalties shall be assessed by the town manager or his designee. No penalty shall be assessed until the person alleged to be in violation is served written notice of the violation by registered mail, certified mail-return receipt requested, or personal service. Refusal to accept the notice shall not relieve the violator of the obligation to pay the penalty. The notice shall describe the violation with particularity and specify the measures needed to come into compliance. The notice shall designate the time within which such measures must be completed. In setting the time limit for compliance, the town shall take into consideration:
 - 1. The quantity and complexity of the work;
 - 2. The consequences of delay;
 - 3. The potential harm to the environment, the public health, and public and private property; and
 - 4. The cost of remedying the damage.

The notice shall warn that failure to correct the violation within the specified time period will result in the assessment of a civil penalty and/or other enforcement action. If after the allotted time period has expired, and the violation has not been corrected, the penalty shall be assessed from the date of receipt of notice of violation and each day of continuing violation thereafter shall constitute a separate violation under this section.

Any person found in violation of other provisions of this article, not specifically enumerated elsewhere, shall be subject to a civil penalty not to exceed one hundred dollars (\$100.00) per violation or per day for any continuing violation.

(3) Payment/collection procedures. Penalties shall be assessed by the town manager or his designee. No penalty shall be assessed until the person alleged to be in violation is served written notice of the violation by registered mail, certified mail-return receipt requested, or personal service. Refusal to accept the notice shall not relieve the violator of the obligation to pay the penalty. The town manager or his designee shall make written demand for payment upon the person in violation. If the payment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the town attorney for institution of a civil action in the name of the town, in the appropriate division of the general court of justice in Wake County for recovering the penalty.

(c) Injunctive relief.

- (1) Whenever the board of aldermen has a reasonable cause to believe that any person is violating or threatening to violate this article, rule, regulation, order duly adopted or issued pursuant to this article or making a connection to a stormwater conveyance or stormwater conveyance system other than in accordance with the terms, conditions, and provisions of approval, the town may, either before or after the institution of any other action or proceeding authorized by the Code, institute a civil action in thename of the town for injunctive relief to restrain and abate the violation or threatened violation.
- (2) The institution of an action for injunctive relief under subsection (c) shall not relieve any party to such proceeding from any further civil or criminal penalty prescribed for violations of this Code.

(d) Criminal penalties. Any person who knowingly or willfully violates any provision of this article, rule, regulation, order duly adopted or issued pursuant to this article shall be guilty of a misdemeanor, punishable by a fine not to exceed five hundred dollars (\$500.00) or imprisonment for not longer than thirty (30) days. Each violation shall be a separate offense.

(Ord. No. 3007, § 2, 2-5-01)

APPENDIX F

Business List for Potential Illicit Connections Notice

The following is a listing of the business types that will be notified concerning the Town of Garner Illegal Discharge Program:

Vehicle rental agencies Painting contractors Carpet cleaners Automotive repair and service shops Automobile body repairing and painting Automobile dealers new and used Automobile service stations Car washing and detailing Oil change services Limousine service Lawn care companies Lawn maintenance companies Pest control companies Kennels Janitor service Air conditioning/heating contractors Apartments Boilers-repair and cleaning Building cleaning-exterior Ready-mixed concrete suppliers Swimming pool service and repair Parking area maintenance