Article 9. Stormwater Management

Part 1 General Provisions

9-10 Purpose

The stormwater management regulations of this article establish minimum requirements to address adverse effects of stormwater runoff associated with new development. Proper management of stormwater runoff will protect property, control stream channel erosion, reduce flooding, protect floodplains, wetlands, water resources, riparian and aquatic ecosystems, and otherwise provide for environmentally sound use of the county's natural resources.

9-11 Scope

Except as otherwise expressly stated, the stormwater management regulations of this article apply to all development within unincorporated Wake County outside the extraterritorial jurisdiction and incorporated boundaries of any municipality.

9-12 Applicability

9-12-1-

Exemptions

The stormwater management regulations of this article do not apply to any of the following development activities:

~~9-12-1~~(A) Agriculture, forestry, or mining.

~~9-12-2~~(B) Office, institutional, commercial, or industrial development that disturbs a land area of one-half acre or less.

~~9-12-3~~(C) Any development in which the owner has accrued a vested right. Wake County recognizes a vested right if either of the following occurred:

~~(A)~~(1) A subdivision plan, site plan, or development permit was officially approved by Wake County or the State before August 13, 2006 and that plan or permit remains unexpired.

(2) The landowner otherwise demonstrates a vested right has accrued under North Carolina Law.

9-12-2 **Minor and Minor-Limited Subdivisions**

~~(B)~~ Developers of residential minor or minor - limited subdivisions have the option of meeting the Target Curve Number standards in Sec. 9-20 or limiting the proposed subdivision's impervious surfaces to a maximum of 15%. Other applicable stormwater regulations are in addition to this requirement.

Part 2 Standards for Managing Stormwater Runoff

9-20 Maximum Curve Number after Development

Developers must manage residential runoff so that after development the site will not exceed the following curve numbers, in accordance with procedures specified in the United States Department of Agriculture, Natural Resources Conservation Service, Technical Release 55, *Urban Hydrology for Small Watersheds*.

Zoning District	Maximum Composite Curve Number, By Soil Group			
	A	B	C	D
R-80W and R-80	37	60	73	79
R-40W and R-40	41	62	75	80
R-30, R-20, R-15, R-10, R-5, Residential Highway, Highway District, General Business and Office and Institutional	43	63	76	81

[Amended on 1/22/2008 by OA 04-07.]

9-20-1 Precipitation Depth

Calculations must be based on a precipitation depth of 3 inches over a 24-hour period.

9-20-2 Draw-down Period

Stored water must be drained over a period of not less than 2 days or more than 5 days.

9-20-3 Stormwater Credits

(A) Purpose

The purpose of establishing a stormwater credit system is to provide incentives to implement better site design and locate new development in a manner that causes less impact to aquatic resources. Certain development practices reduce the generation of stormwater from the site; thereby reducing the size and cost of stormwater storage. In addition, these practices can provide partial removal of many pollutants. The credit system directly translates into cost savings and better protection of water resources.

(B) Disconnected Impervious Surfaces

Disconnected rooftops and other disconnected impervious surfaces are encouraged. Runoff from these disconnected surfaces must be spread over pervious areas as sheet flow. As a credit, these disconnected impervious surfaces will be assigned the lower curve number specified by procedures of the United States Department of Agriculture, Natural Resources Conservation Service, Technical Release 55, *Urban Hydrology for Small Watersheds*.

(C) Reforestation

The planting of trees/shrubs is encouraged as a means of reducing runoff. As credit for such practices, reforested areas will be assigned the curve number for woods in good condition per procedures in the United States Department of Agriculture, Natural Resources Conservation Service, Technical Release 55, *Urban Hydrology for Small Watersheds*. Areas planted with trees/shrubs must meet the following standards to qualify for the credit.

(1) Tree/shrub Density and Spacing

Planted trees or shrubs must meet the minimum density and spacing standards of the United States Department of Agriculture, Natural Resources Conservation Service, as specified in the *Field Office Technical Guide for Tree/Shrub Establishment*. Existing trees or shrubs may be used towards meeting the planting standard.

(2) Mulching

An initial application of mulch is required for the area designated for reforestation. Mulching must meet applicable standards of the United States Department of Agriculture, Natural Resources Conservation Service, as specified in the *Field Office Technical Guide for Mulching-Temporary Protection of Critical Areas without Seeding*. Existing groundcover may be used towards meeting the mulching standard.

(D) Cluster and Open Space Subdivisions

Cluster and open space subdivisions are encouraged. In applying curve number calculations to such developments, the county may not penalize such subdivisions. Calculations must take into account the lots' proportionate share of right-of-way and permanent open space.

9-20-4 Stormwater Control Measures

(A) Location of Stormwater Control Measures

Stormwater control measures capturing stormwater runoff from multiple lots shall be located in a common area of the development and shall be maintained by a property owners' or homeowners' association.

(B) Easements

(1) The developer must record a document or documents showing a permanent easement for each of the following purposes: drainage, all stormwater control measures, access by Wake County for necessary inspections and enforcement and maintenance access by the private entity (property owners' or homeowners' association) responsible for maintenance.

(2) The stormwater control measures shall be shown and labeled within the easement. The entire footprint of the stormwater control measure system must be included in the access and maintenance easement.

(3) The maintenance easement shall be 10 or more feet in width, not including lateral or inclined slopes that exceed 3:1 (horizontal to vertical) around the stormwater control measure to provide sufficient room to complete maintenance tasks. The stormwater control measure system may include, but is not limited to: forebay, riser structure, the stormwater control measure device, dam embankment, outlet and emergency spillway.

(4) The access easement shall extend to the nearest public right-of-way or public easement.

(C) Setback Requirements - Wastewater System

Stormwater control measures shall be set back from all wastewater system components in accordance with the applicable provisions of the *Regulations Governing Wastewater Treatment and Dispersal Systems in Wake County*.

9-21 State Nutrient Management Strategy Rules

9-21-1 State stormwater management rules that implement the Neuse River Basin Nutrient Sensitive Waters Management Strategy (15A NCAC 02B .0235) apply in both the Neuse and the Cape Fear River Basins and are hereby incorporated by reference.

9-21-2 State stormwater management rules for new development that implement the Falls Reservoir Water Supply Nutrient Strategy (15A NCAC 02B .0277) are hereby incorporated by reference.

9-21-3 State stormwater management rules for new development that implement the Jordan Water Supply Nutrient Management Strategy (15A NCAC 02B .0265, the "Jordan new development rules") are hereby incorporated by reference. These rules shall supersede the Neuse Rules within the Jordan Lake watershed portion of the Cape Fear River Basin.

(A) Delayed Applicability of the Jordan New Development Rules

(1) Pursuant to North Carolina Session Law 2015-241, Section 14.5 (c), local government implementation of rules directed to nutrient management that have previously been temporarily delayed by the North Carolina General Assembly, such as the Jordan new development rules, are delayed an additional 3 years, which is until August 10, 2020 for the Jordan new development rules.

(2) Pursuant to North Carolina Session Law 2015-246, local governments, including Wake County, are prohibited from requiring or enforcing compliance with the Jordan new development rules until the delay in local government implementation of the Jordan new development rules, which delay has been mandated through the enactment of legislation by the North Carolina General Assembly, ends.

(3) The Jordan new development rules shall become effective and enforceable upon the end of all applicable legislative delays.

[Amended by OA 01-16 on 4/4/2016.]

9-21-4 Copies of related codes, standards and guidelines are on file in the office of the Wake County Department of Environmental Services Water Quality Section.

[Amended by OA 03-12 on 7/2/2012.]

9-22 Downstream Impact Analysis

9-22-1 General Standards.

~~Downstream Impact Analysis: The~~ A Downstream Impact Analysis must be performed in accordance with the "ten percent rule" using the steps set forth in Section 9-23-2 below and a copy of the analysis must be provided with the permit application. The purpose of the Downstream Impact Analysis is to determine if the project will cause any unintentional additional impacts on flooding or channel degradation downstream of the project site. The analysis must include the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream. This analysis shall be performed at the outlet(s) of the site, and downstream at each tributary junction to the point(s) in the conveyance system where the area of the portion of the site draining into the system is less than or equal to ten percent of the total drainage area above that point.

9-22-2 Policies and Procedures

The ~~typical~~required steps in the application of the 10 percent rule are:

(a) Using a topographic map, determine the point downstream where the proposed site equals 10 percent of the total drainage area, called the 10 percent point. Identify all tributary junctions between the downstream site boundary and the 10 percent point. All points identified, as well as the outlet of the site, are known as 10 percent rule comparison points.

(b) Using a hydrologic model with existing land uses, determine the pre-Development peak runoff rate (cubic feet per second) for the 10-year design storm event at each comparison point.

(c) Insert the proposed site design and proposed stormwater control measures (SCM) into the land uses and determine the post-Development peak runoff rate for the 10-year design storm at each comparison point.

(d) If the post-Development peak discharge rate is equal to or less than pre-Development conditions at all comparison points, no further analysis is required.

(e) If the 10-year post-Development peak discharge rate is greater than the pre-Development peak discharge rate at any comparison point, then one of the following actions must be taken:

i. Revise the site plan for the proposed site to incorporate better use of natural features, design additional structural control facilities, reduce impervious cover, or alter timing of peak flows to lower post-Development flows at each comparison point to pre-Development levels.

ii. Obtain a flow easement from downstream property owners through the 10 percent point where the post-Development peak discharge rate is higher than the pre-Development peak discharge rate.

9-23 Stormwater Design Manual

The Wake County Department of Environmental Services may furnish additional guidance and standards for the proper implementation of the regulations of this article and may provide such information in the form of a *Stormwater Design Manual*. Stormwater management practices that are designed, constructed, or maintained in accord with the *Stormwater Design Manual* must be presumed to comply with these regulations.

9-24 Miscellaneous

~~9-23-1~~9-24-1 Calculations Regarding Ponds, Lakes, and Streams

Surface water bodies may not be assigned a curve number for impervious surfaces. Instead such water bodies will be removed from calculations so that developments are not penalized for their presence.

Part 3 Completion and Maintenance of Improvements

9-30 Party Responsible for Completion of Improvements

The developer is responsible for completing all stormwater improvements in accordance with the requirements of this article and other applicable ordinances and laws.

9-31 Assurance that Improvements will be completed

~~9-31-~~19-31-1 Performance Guarantee

The county may not approve a record plat, or in the case of single-lot development not requiring a record plat may not issue a building permit, until those stormwater improvements required of the developer have been completed or a performance guarantee has been provided. Such performance guarantees must comply with the performance guarantee provisions of Sec. 8-22.~~.~~.

~~9-31-~~29-31-2 As-Built Plans

Upon completion of required improvements, the developer or the developer's representative must submit as-built plans prepared by a licensed surveyor of required stormwater improvements to the Wake County Department of Environmental Services. These plans must indicate whether stormwater improvements were constructed in accordance with the county approved stormwater plan.

9-32 Assurance that Improvements will be maintained

~~9-32-~~19-32-1 Maintenance Required

All stormwater improvements must be maintained so they will continue to serve their intended functions.

~~9-32-29-32-2~~ Parties Responsible for Maintenance of Improvements

(A) The developer must maintain stormwater improvements until accepted by a property owners' association or lot owner via a Stormwater Agreement. The developer must disclose which party will be responsible for continued maintenance on the record plat and on the stormwater management plan.

(B) Before improvements are accepted for maintenance by the property owners' association or lot owner, the developer or the developer's engineer or other representative, as authorized by Statute, must certify to the property owners' association or lot owner and to the county that improvements are complete and functioning as designed.

~~9-32-39-32-3~~ Maintenance Plan

(A) The developer must record, and reference on the record plat, a maintenance plan that instructs the property owners' association or lot owner about the annual maintenance tasks and associated costs for at least a 20-year period.

(B) It will be the responsibility of the property owners' association or lot owner to update the maintenance plan at least every 10 years~~.~~

~~9-32-49-32-4~~ Maintenance Agreement

(A) The developer must record, and reference on the record plat, a maintenance agreement, or restrictive covenant that sets forth the property owners association's or lot owner's

c~~C~~ontinuing responsibilities for maintenance, including specifying how cost will be apportioned among lot owners served.

(B) The maintenance agreement must provide that the association and its individual members are jointly and severally liable for maintenance.

~~9-32~~-59-32-5 Annual Maintenance Inspection and Report

(A) The person or entity responsible for maintenance of any structural and non-structural stormwater control measures installed pursuant to this ordinance shall submit an annual inspection report from one of the following persons providing services only in their area of competence: a qualified registered North Carolina professional engineer, surveyor, landscape architect, soil scientist, aquatic biologist, or person certified by the North Carolina Cooperative Extension Service for stormwater treatment practice inspection and maintenance or other certification as approved by Wake County.

(B) Annual inspection reports are due by June 30 of each year. The first annual report is due by June 30 following one year after approval of the as-built plan. For structural stormwater control measures located on properties subject to property owners' association agreements, the property owners' association is responsible for collecting and submitting information on all individual lot structural stormwater conveyance measures installed pursuant to this ordinance on an annual basis.

(C) The inspection report shall contain all of the following:

The name and address of the parcel owner, the name and address of the party responsible for maintenance of the stormwater control measure, the name of the subdivision or development, the recorded book and page number of the lot of each structural and non-structural stormwater control measure; a statement regarding whether or not inspected structural and non-structural stormwater control measures are performing properly and are in compliance with the terms and conditions of the approved maintenance agreement required by this ordinance. The report shall include any noted deficiencies, needed maintenance and recommended corrective action. The report shall include the name, contact information, original signature, and seal (if applicable) of the qualified person conducting the inspection.

(D) All reports shall be on a form provided by or approved by Wake County.

~~9-32~~-69-32-6 Documents Required Before Plat Approval or Building Permit

All maintenance documents required by this article must be submitted to the Subdivision Administrator or Environmental Services Stormwater Engineer before record plat approval, and such documents must be referenced on the record plat, or, in the case of single-lot developments not requiring record plats, documentation must be submitted to the Zoning Administrator or

Environmental Services Stormwater Engineer before building permit issuance.

Part 4 Illicit Discharge Detection and Elimination

9-40 Illicit Discharges

9-40-1 Illicit Discharge Definition

-Illicit discharges are flows in the stormwater collection system that are not associated with stormwater runoff or an allowable discharge.

9-40-2 Discharge Restrictions

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 manner and amount that the substance is likely to reach a stormwater conveyance or the waters of the State, any liquid, solid, gas, or other substance, other than stormwater; provided that non-stormwater discharges associated with the following activities are allowed, so long as they do not significantly impact water quality:

(A) water line flushing;

(B) landscape irrigation;

(C) diverted stream flows;

(D) rising ground waters;

(E) uncontaminated ground water infiltration;

(F) uncontaminated pumped ground water;

(G) discharges from potable water sources;

(H) foundation drains;

(I) air conditioning condensation;

(J) irrigation water;

(K) springs;

(L) water from crawl space pumps;

(M) footing drains;

(N) lawn watering;

(O) non-commercial car washing;

(P) flows from riparian habitats and wetlands;

(Q) dechlorinated swimming pool discharges;

(R) street wash water;

(S) firefighting emergency activities;

~~(R)~~(T) wash water from cleaning of buildings; and

~~(S)~~(U) (U) NPDES permitted discharges.

~~9-40-23~~ Prohibited Substances

Prohibited substances include but are not limited to:

(A) oil;

(B) anti-freeze;

(C) chemicals;

(D) animal waste;

(E) paints;

(F) garbage;

(G) litter;

~~(G)~~(H) Septic tank and sanitary sewer discharges.

9-20 Spills

~~Part 4~~Part 5 Administration

9-50 Application Requirements

~~9-40-~~19-50-1 Stormwater Plan Required

For any development requiring stormwater improvements, no applicant may receive a grading, building or other permit required for land disturbance without first having a county approved stormwater management plan.

~~9-40-29-~~50-2 Submittal Procedures

Stormwater management plans must be submitted and reviewed in conjunction with subdivision plans, or, in the case of single-lot developments requiring stormwater management, in conjunction with site plans.

9-51 Modifications and Waivers

Requests for modifications or waivers of the stormwater management standards of this article must be processed in accordance with the procedures of 19-36.

9-52 Appeals

~~9-42-19-52-1~~ Authority

(A) Any person affected by any decision of the county that relates to interpretation or application of this ordinance may appeal to the hearing panel of the Wake County Human Services and Environmental Services Board.

(B) Any alleged error of the county in making or refusing to make a decision may be basis for an appeal.

~~9-42-~~29-52-2 Filing

The appeal must be filed in writing with the Wake County Stormwater Engineer within 30 days of the decision complained of and must specify the grounds for appeal.

~~9-42-39-52-3~~ Hearing

(A) The hearing panel of the Human Services and Environmental Services Board must fix a time and place for the hearing.

(B) At least 10 days prior to the hearing, the hearing panel must publish notice of the hearing in a newspaper of general circulation within the county.

(C) The hearing panel must render a decision in writing within 45 days of receiving the appeal.

~~9-42-~~49-52-4 Decision-Making Criteria

In acting on appeals the hearing panel of the Human Services and Environmental Services Board must determine, by simple majority vote, if the appellant has presented substantial evidence that the county erred and whether the county correctly interpreted the stormwater management regulations of Article 9.

~~9-42-~~59-52-5 Subsequent Appeals

The appellant may appeal the hearing panel's decision to the full Human Services and Environmental Services Board by filing an appeal within 10 days of the hearing panel's decision. Such appeals must follow the same procedure as the original hearing before the Board's hearing panel.

~~Part 5~~Part 6 Enforcement and Penalties

9-60 General

Failure to complete required improvements or failure to maintain improvements so they continue to function as required are violations and subject to a fine of up to $1,000 per day and other penalties, remedies, and enforcement powers specified in Article 20.

9-61 Inspection of Stormwater Improvements

Wake County agents and officials have the right to inspect sites to determine whether required stormwater improvements are being installed and maintained in compliance with this ordinance.

OA 05/05 May 15, 2006

Article 10. Erosion and Sedimentation Control

06/4/2018

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Part 1 General

10-10 Jurisdiction

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

extraterritorial jurisdictions of 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~~Article when they are more restrictive than similar regulations of the North Carolina Sedimentation Control Commission.

10-10-3 The Wake County Department of Environmental Services is responsible for the administration and enforcement of this ~~article~~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~~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~~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 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.

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~~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~~Article, including the Director's duly authorized agent or delegate.

Director of North Carolina Division of Energy, Mineral and Land Resources~~of Land Resources~~
The Director of the North Carolina Division of Energy, Mineral and Land 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~~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.

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 may be taking place at different times and on different schedules, but under one proposed 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~~Article 4, as amended) and all rules, regulations 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

(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~~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.~~)~~

Tract
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, 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 and state and federal holidays during which weather conditions or soil conditions permit land-disturbing activity to be undertaken.

10-13 Applicability

~~10-13-1~~ (A)Except for the exemptions noted in Section 10-13-2, the erosion and sedimentation control regulations of this ~~article~~Article apply to all disturbances of land equal to or greater than one acre, and to land disturbances of less than one acre that are part of a larger common plan of development or sale, including without limitation a subdivision. For land disturbances of less than one acre that are not part of a larger common plan of development or sale, refer to Section 10-20-5(B) of this ~~article~~Article for erosion and sedimentation control requirements. This ~~article~~Article expressly applies to the following land-disturbing activities:

~~(A)~~ (B)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)~~ (C)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 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)~~ (D) 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~~Article do not apply in the following situations:

(A) Agricultural Activities

Land-disturbing activities 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 agriculture 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:

(1) The timber cutting is not an initial step in a development project or part of a larger common plan of development or sale, 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.

(2) The land disturbing activities undertaken on forestland for the production and harvesting of timber and timber products are conducted in accordance with best management practices set forth in *Forest Practice Guidelines Related to Water Quality* as published by the North Carolina Forest Service.

(a) The North Carolina Forest Service is the agency that makes the determination whether the land disturbing activities on forestland are being conducted in accordance with *Forest Practice Guidelines Related to Water Quality.*

(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:

10-20-1 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 Plan and Permit ~~(Greater Than One Acre of Disturbed Area)~~

(1) An approved erosion and sedimentation control plan and a land disturbance permit is required w~~W~~henever land disturbing activities will result in the disturbance of land equal to or greater than one acre and to land disturbances of less than one acre that are part of a larger common plan of development or sale, including without limitation a subdivision.

~~(1)~~(2) 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.

~~(2)~~(3) The person conducting the land-disturbing activity must plant or otherwise provide a permanent ground cover sufficient to restrain erosion after completion of construction or development within 14 calendar ~~5 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 than one acre ~~on a tract~~- and such disturbance is not part of a larger common plan of development or sale, including without limitation a subdivision, an erosion and sedimentation control plan and 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~~a construction entrance, 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 sides 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~~-than one acre that are not part of a larger common plan of development or sale, 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~~Article.

(8) Notwithstanding the provisions of subsection (B)(1) herein, a permit is not required for land disturbing activities that disturb less than one acre upon a lot for which a certificate of occupancy for a single-family dwelling previously has been issued.

10-20-6 Analysis

~~(7)~~(1)

~~10-20-6~~10-20-7 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.

~~10-20-7~~10-20-8 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~~10-20-9 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~~UNITED STATES DEPARTMENT OF AGRICULTURE, ~~Soil~~ Natural Resources Conservation Service's *National Engineering Field Manual for Conservation Practices*, or other calculation procedures acceptable to the County.

~~10-20-9~~10-20-10 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 with the following stabilization timeframes:

General Ground Stabilization Requirements		
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 slope length is 10' or less & is not steeper than 2:1, 14 days are allowed
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW zones.

Falls Lake Watershed Ground Stabilization Requirements		
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	None
Slopes 3:1 or flatter	10 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	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~~10-20-11 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, Mineral and Land Resources.

(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 ~~a~~ land-disturbing activity in a HQW zone within 7 calendar ~~15 working~~ days ~~or 21 calendar days, whichever period is shorter,~~ following completion of any phase or grading, or when grading equipment leaves the site.

10-20-12 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 Natural Resources 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 Natural Resources 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, temporary 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

(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.

(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 devices must be utilized to prevent excessive on-site erosion of the landfill facility or portion thereof.

(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~~UNITED STATES DEPARTMENT OF AGRICULTURE, Natural Resources ~~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.

(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:

ial	num Stormwater Discharge Velocities	
	er Second	s per Second
and (noncolloidal)		
loam (noncolloidal)		
am (noncolloidal)		
ary film loam		
ravel		
ay (very colloidal)		
d, loam to cobbles (noncolloidal)		
d, silt to cobbles (colloidal)		
l silts (noncolloidal)		
l silts (colloidal)		
e gravel (noncolloidal)		
es and shingles		
s and hard pans		

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

10-22-1 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~~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;

(2) 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 or~~f~~ 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;

(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 1I.0201-0209).

10-22-3 Riparian Area Zones

The protected riparian area has two zones as follows:

(A) Zone 1

Zone 1 is intended to be an undisturbed area of forest vegetation. Any forest vegetation, as defined in Rule .0202 of 15A NCAC 2B, in Zone 1 as of July 22, 1997 must be maintained and protected in accordance with this section.

(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 ~~Resouces~~Resources~~Quality~~; and

(f) 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 than 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.

(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.

(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~~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~~Article, the North Carolina Sedimentation Pollution Control Act, or any order adopted pursuant to the erosion and sedimentation control regulations of this ~~article~~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.

10-23-3 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)~~ (A)Except as provided in Section 10-13, it is unlawful to conduct any land disturbing activity that will ~~disturb~~ result in the ~~more than~~ disturbance of land equal to or greater than one acre, or that will result in the land disturbance of less than one acre if part of a larger common plan of development or sale, including without limitation a subdivision, ~~one acre~~ until both an approved erosion and sedimentation control plan and a land disturbance permit issued by the County have been obtained.

~~(B)~~ (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~~disturb less than one acre and that are not part of a larger common plan of development or sale ~~in area~~ when sediment control measures are needed to protect against off-site damages.

~~(C)~~ (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~~Article. Detailed guidelines for plan preparation may be obtained from the Wake County Department of Environmental Services upon request.

(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 ~~his~~ -their Attorney in Fact~~authorized 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~~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~~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.

(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.

(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, Mineral and Land ~~ResourcesLand Resources of~~Resources of such disapproval within 10 days. The County must advise the applicant and the North Carolina State Division of Energy, Mineral and Land ~~ResourcesLand 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 or off-site sedimentation exists, and the erosion and sedimentation control plan is inadequate to meet the requirements of this ~~article~~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~~Article.

(E) Additional Requirements

(1) No land disturbance permit may be issued until the County is assured that the proposed land-disturbing 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~~Article until that violation is corrected.

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~~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 initial land disturbance permit is valid for 2 calendar years except as otherwise noted in Section 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~~ in -one or two year increments~~s~~ ~~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~~ a 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~~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~~Article, or rules or orders adopted or issued pursuant to the erosion and sedimentation control regulations of this ~~article~~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~~Article.

(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~~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~~Article, or rules or orders adopted or issued pursuant to this ~~article~~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~~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

(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, Mineral 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, Mineral 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 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~~Article and will be deemed in violation of this ~~article~~Article and subject to the enforcement and penalty provisions of this ~~article~~Article and ~~Article~~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 ~~article~~Article;

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 A~~article~~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~~Article, the North Carolina Sedimentation Pollution Control Act, or rules or orders adopted pursuant to this ~~article~~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~~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.

10-42-2 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

(A)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

(B) The notice must direct the violator to either pay the assessment, appeal the assessment within 30 days after receipt of the notice of assessment, or request a remission of the penalty within 60 days after the 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.

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 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 in accordance with G. S. 115C-457.2.

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~~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~~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~~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~~Article, a rule or order adopted or issued pursuant to this ~~article~~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~~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~~Article.

10-47 Civil Relief

10-47-1 Any person injured by a violation of this ~~article~~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 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~~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~~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~~Article 10 amended 11/19/2007 by OA 02-07]