

**15A NCAC 02B .0243 CATAWBA RIVER BASIN: PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS**

The following is the management strategy for maintaining and protecting existing riparian buffers along the Catawba River mainstem below Lake James and along mainstem lakes from and including Lake James to the North Carolina and South Carolina border in the Catawba River Basin.

- (1) **PURPOSE.** The purpose of this Rule shall be to protect and preserve existing riparian buffers along the Catawba River mainstem below Lake James and along mainstem lakes from and including Lake James to the North Carolina and South Carolina border in the Catawba River Basin in order to maintain their pollutant removal functions as an aid in protecting the water quality of the lakes and connecting river segments.
- (2) **DEFINITIONS.** For the purpose of Rules 15A NCAC 02B .0243 and 15A NCAC 02B .0244, these terms shall be defined as follows:
  - (a) "Access Trails" means pedestrian trails constructed of pervious or impervious surfaces, and related structures to access a surface water including boardwalks, steps, rails, signage, etc.
  - (b) "Archaeological Activities" means activities conducted by a Registered Professional Archaeologist (RPA).
  - (c) "Airport Facilities" means all properties, facilities, buildings, structures, and activities that satisfy or otherwise fall within the scope of one or more of the definitions or uses of the words or phrases "air navigation facility," "airport," or "airport protection privileges" under G.S. 63-1; the definition of "aeronautical facilities" in G.S. 63-79(1); the phrase "airport facilities" as used in G.S. 159-48(b)(1); the phrase "aeronautical facilities" as defined in G.S. 159-81 and G.S. 159-97; and the phrase "airport facilities and improvements" as used in Article V, Section 13, of the North Carolina Constitution, which shall include, without limitation, any and all of the following: airports, airport maintenance facilities, clear zones, drainage ditches, fields, hangars, landing lighting, airport and airport-related offices, parking facilities, related navigational and signal systems, runways, stormwater outfalls, terminals, terminal shops, and all appurtenant areas used or suitable for airport buildings or other airport facilities, and all appurtenant rights-of-way; restricted landing areas; any structures, mechanisms, lights, beacons, marks, communicating systems, or other instrumentalities or devices used or useful as an aid, or constituting an advantage or convenience to the safe taking off, navigation, and landing of aircraft, or the safe and efficient operation or maintenance of an airport or restricted landing area; easements through, or other interests in, air space over land or water, interests in airport hazards outside the boundaries of airports or restricted landing areas, and other protection privileges, the acquisition or control of which is necessary to ensure safe approaches to the landing areas of airports and restricted landing areas, and the safe and efficient operation thereof; and any combination of any or all of such facilities. Notwithstanding the foregoing, the following shall not be included in the definition of "Airport Facilities":
    - (i) satellite parking facilities;
    - (ii) retail and commercial development outside of the terminal area, such as rental car facilities; and
    - (iii) other secondary development, such as hotels, industrial facilities, free-standing offices and other similar buildings, so long as these facilities are not directly associated with the operation of the airport, and are not operated by a unit of government or special governmental entity such as an airport authority.
  - (d) "Approved local government" means any government with a riparian buffer ordinance approved by the Division pursuant to Subparagraph (3)(b) of this Rule.
  - (e) "Channel" means a natural water-carrying trough cut vertically into low areas of the land surface by erosive action of concentrated flowing water or a ditch or canal excavated for the flow of water.
  - (f) "DBH" means diameter at breast height of a tree measured at 4.5 feet above ground surface level.
  - (g) "Forest plantation" means an area of planted trees that may be conifers (pines) or hardwoods. On a plantation, the intended crop trees are planted rather than naturally regenerated from seed on the site, coppice (sprouting), or seed that is blown or carried into the site.

- (h) "Full Pond Level" is a term used by Duke Energy Inc. that refers to the project water level, referenced to mean sea level, for each of the seven mainstem lakes along the Catawba River. The landward edge of the lakes at full pond level represents the project boundary for each lake.
  - (i) "Greenway / Hiking Trails" means pedestrian trails constructed of pervious and impervious surfaces and related structures including but not limited to boardwalks, steps, rails, signage, etc.
  - (j) "High Value Tree" means a tree whose stump diameter is equal to or exceeding 18-inches.
  - (k) "Mainstem lakes" means the following impoundments created along the mainstem of the Catawba River: Lake James, Lake Rhodhiss, Lake Hickory, Lookout Shoals Lake, Lake Norman, Mountain Island Lake and Lake Wylie (North Carolina portion).
  - (l) "Riparian buffer enhancement" is defined as the process of converting a non-forested riparian area, where woody vegetation is sparse (greater than or equal to 100 trees per acre but less than 200 trees per acre) to a forested riparian buffer area. The enhanced, forested riparian buffer area shall include a minimum of at least two native hardwood tree species planted at a density sufficient to provide 320 trees per acres at maturity, and diffuse flow through the riparian buffer shall be maintained.
  - (m) "Riparian buffer restoration" is defined as the process of converting a non-forested riparian area, where woody vegetation is absent (less than 100 trees per acre) to a forested riparian buffer area. The restored, forested riparian buffer area shall include a minimum of at least two native hardwood tree species planted at a density sufficient to provide 320 trees per acres at maturity, and diffuse flow through the riparian buffer shall be maintained.
  - (n) "Shoreline stabilization" is the in-place stabilization of an eroding shoreline. Stabilization techniques which include "soft" methods or natural materials (such as root wads, or rock vanes) may be considered as part of a restoration design. However, stabilization techniques that consist primarily of "hard" engineering, such as concrete lined channels, rip rap, or gabions, while providing bank stabilization, shall not be considered stream restoration.
  - (o) "Stream restoration" is defined as the process of converting an unstable, altered or degraded stream corridor, including adjacent riparian zone and flood-prone areas to its natural or referenced, stable conditions considering recent and future watershed conditions. This process also includes restoring the geomorphic dimension, pattern, and profile as well as biological and chemical integrity, including transport of water and sediment produced by the stream's watershed in order to achieve dynamic equilibrium. "Referenced" or "referenced reach" means a stable stream that is in dynamic equilibrium with its valley and contributing watershed. A reference reach can be used to develop natural channel design criteria for stream restoration projects.
  - (p) "Stump diameter" means diameter of a tree measured at six inches above ground surface level.
  - (q) "Surface water" means all waters of the state as defined in G.S. 143-212 except underground waters.
  - (r) "Temporary road" means a road constructed temporarily for equipment access to build or replace hydraulic conveyance structures or water dependent structures, or to maintain public traffic during construction.
  - (s) "Tree" means a woody plant with a DBH equal to or exceeding five inches or a stump diameter equal to or exceeding six inches.
- (3) **APPLICABILITY.** This Rule shall apply to a 50-foot wide riparian buffer along the Catawba River mainstem below Lake James and along the mainstem lakes in the Catawba River Basin, excluding wetlands. Wetlands within 50 feet of surface waters shall be considered as part of the riparian buffer but are regulated pursuant to 15A NCAC 02H .0506. The riparian buffers protected by this Rule shall be measured pursuant to Item (4) of this Rule. Riparian buffers along the Catawba River mainstem below Lake James and along mainstem lakes shall be subject to this Rule unless one of the following applies.
- (a) **EXEMPTION WHEN EXISTING USES ARE PRESENT AND ONGOING.** This Rule shall not apply to portions of the riparian buffer where a use is existing and ongoing. Only the portion of the riparian buffer that contains the footprint of the existing and ongoing use is

exempt from this Rule. The determination of whether a use is existing and ongoing will be made either by the Division or approved local government; whichever is appropriate according to the administration of the buffer program. A use is existing and ongoing when it is a completed and maintained activity, an activity with appropriate valid permits, or an activity with documentation for unexpired vested rights, as described below:

- (i) A use that was present within the riparian buffer as of June 30, 2001 and has continued to exist since that time. Existing uses shall include agriculture, buildings, industrial facilities, commercial areas, transportation facilities, maintained lawns, utility lines and on-site sanitary sewage systems. Change of ownership through purchase or inheritance is not a change of use. Activities necessary to maintain uses are allowed provided that the site remains similarly vegetated, no impervious surface is added within 50 feet of the surface water where it did not previously exist as of the effective date of the Rule, and existing diffuse flow is maintained. Grading and revegetating Zone 2 is allowed provided that the health of the vegetation in Zone 1 is not compromised, the ground is stabilized and existing diffuse flow is maintained.
  - (ii) A use that can be documented to the Division or the appropriate approved local government that meets at least one of the following criteria:
    - (A) Project requires a 401 Certification/404 Permit, these were issued prior to June 30, 2001 and are still valid;
    - (B) Projects that require a state permit, such as landfills, NPDES wastewater discharges, land application of residuals and road construction activities, have begun construction or are under contract to begin construction and had received all required state permits prior to June 30, 2001;
    - (C) Projects that are being reviewed through the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor and that have reached agreement with DENR on avoidance and minimization by June 30, 2003; and
    - (D) Projects that are not required to be reviewed by the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor if a Finding of No Significant Impact has been issued for the project and the project has the written approval of the DWQ prior to June 30, 2001.
  - (iii) A project that can be documented to the Division or the appropriate approved local government that has vested rights that were established or recognized for that project under the common law or by G.S. 153A-344(b), 153A-344.1, 160A-385(b), or 160A-385.1 prior to July 1, 2001. This Rule does not confer or restrict a vested right established or recognized under common law or G.S. 153A-344(b), 153A-344.1, 160A-385(b), or 160A-385.1.
  - (iv) This Rule shall apply at the time an existing use is changed to another use. Change of use shall include the following:
    - (A) Impervious surface is added to the riparian buffer in locations where it did not exist previously either on the ground or in proposed site plans showing the locations of proposed impervious surfaces for uses defined as existing and ongoing in Subitem (3)(a)(ii) or Subitem (3)(a)(iii) of this Rule; or
    - (B) An agricultural operation within the riparian buffer is converted to a non-agricultural use.
- (b) **LOCAL GOVERNMENTS THAT HAVE APPROVED RIPARIAN BUFFER ORDINANCES.** All local governments that have land use authority along the Catawba River mainstem below Lake James and along mainstem lakes in the Catawba River Basin may adopt local riparian buffer ordinances to protect water quality. The Division shall approve the local riparian buffer ordinance within 30 days after receiving the request from local governments, if the Division determines that the local riparian buffer ordinance provides

equal to or greater water quality protection than this Rule. This Rule shall not apply in any area where a local government has obtained the Division's approval of the local riparian buffer ordinance, provided that the local government is implementing and enforcing the approved local riparian buffer ordinance. The Division, upon determination that the local government is failing to implement or enforce the approved local buffer ordinance, shall notify the local government in writing of the local program inadequacies. If the local government has not corrected the deficiencies within 90 days of receipt of written notification, then the Division shall implement and enforce the provisions of this Rule.

- (c) **RIPARIAN AREAS AND ACTIVITIES NOT REGULATED UNDER AN APPROVED LOCAL GOVERNMENT ORDINANCE.** The Division shall be responsible for the implementation of this rule for all riparian areas and activities not regulated under a Division-approved local government ordinance.
- (4) **ZONES OF THE RIPARIAN BUFFER.** The protected riparian buffer shall have two zones as follows:
  - (a) Zone 1 shall consist of a forested area that is undisturbed except for uses provided for in Item (6) of this Rule. The location of Zone 1 shall be as follows:
    - (i) For the Catawba River mainstem below Lake James, Zone 1 shall begin at the most landward limit of the top of the bank and extend landward a distance of 30 feet on all sides of the surface water, measured horizontally on a line perpendicular to a vertical line marking the edge of the top of the bank.
    - (ii) For the mainstem lakes located on the Catawba River mainstem, Zone 1 shall begin at the most landward limit of the full pond level and extend landward a distance of 30 feet, measured horizontally on a line perpendicular to a vertical line marking the edge of the full pond level.
  - (b) Zone 2 shall consist of a stable, vegetated area that is undisturbed except for uses provided for in Item (6) of this Rule. Grading and revegetating Zone 2 is allowed provided that the health of the vegetation in Zone 1 is not compromised. Zone 2 shall begin at the outer edge of Zone 1 and extend landward 20 feet as measured horizontally on a line perpendicular to a vertical line marking the outer edge of Zone 1. The combined width of Zones 1 and 2 shall be 50 feet on all sides of the surface water along the Catawba River mainstem below Lake James and along mainstem lakes in the Catawba River Basin.
- (5) **DIFFUSE FLOW REQUIREMENT.** Diffuse flow of runoff shall be maintained in the riparian buffer by dispersing concentrated flow and reestablishing vegetation.
  - (a) Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters Zone 2 of the riparian buffer.
  - (b) Periodic corrective action to restore diffuse flow shall be taken if necessary to impede the formation of erosion gullies.
  - (c) No new stormwater conveyances are allowed through the buffers except for stormwater management ponds provided for in Item (6) of this Rule.
- (6) **TABLE OF USES.** The following chart sets out the uses and their category designation under this Rule as exempt, allowable, or allowable with mitigation. Any uses, which are not listed in the table, are prohibited. The requirements for each category listed in the table as well as prohibited uses not set out in the table are given in Item (7) of this Rule.

Use	Exempt	Allowable	Allowable with Mitigation
Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities: <ul style="list-style-type: none"> <li>• Pedestrian access trails that are restricted to the minimum width practicable and do not exceed 4 feet in width of buffer disturbance, and provided that installation and use does not result in removal of trees as defined in this Rule and no</li> </ul>	X		

<p>impervious surface is added to the riparian buffer</p> <ul style="list-style-type: none"> <li>• Pedestrian access trails that exceed 4 feet in width of buffer disturbance, the installation or use results in removal of trees as defined in this Rule or impervious surface is added to the riparian buffer</li> </ul>		X	
<p>Airport facilities:</p> <ul style="list-style-type: none"> <li>• Airport or airstrip facilities that impact equal to or less than 150 linear feet or one-third of an acre of riparian buffer</li> <li>• Airport or airstrip facilities that impact greater than 150 linear feet or one-third of an acre of riparian buffer</li> </ul>		X	X
Archaeological activities	X		
Bridges		X	
Canoe Access provided that installation and use does not result in removal of trees as defined in this Rule and no impervious surface is added to the buffer	X		
<p>Dam maintenance activities:</p> <ul style="list-style-type: none"> <li>• Dam maintenance activities that do not cause additional buffer disturbance beyond the footprint of the existing dam or those covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3</li> <li>• Dam maintenance activities that do cause additional buffer disturbance beyond the footprint of the existing dam or those not covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3</li> </ul>	X	X	
<p>Drainage ditches, roadside ditches and stormwater outfalls through riparian buffers:</p> <ul style="list-style-type: none"> <li>• Existing drainage ditches, roadside ditches, and stormwater outfalls provided that they are managed to minimize the sediment, nutrients and other pollution that convey to waterbodies</li> <li>• New drainage ditches, roadside ditches and stormwater outfalls provided that a stormwater management facility is installed to control pollutants and attenuate flow before the conveyance discharges through the riparian buffer</li> <li>• New stormwater discharges to existing man-made conveyances (including, but not limited to, drainage ditches, roadside ditches, and stormwater outfalls) provided that the new stormwater discharge does not result in the need to alter the existing man-made conveyances</li> </ul>	X	X	X
<p>Driveway crossings of surface waters subject to this Rule:</p> <ul style="list-style-type: none"> <li>• Driveway crossings on single family residential lots subdivided or recorded prior to the effective date of this Rule that disturb equal to or less than 25 linear feet or 2,500 square feet of riparian buffer</li> <li>• Driveway crossings on single family residential lots subdivided or recorded prior to the effective date of this Rule that disturb greater than 25 linear feet or 2,500 square feet of riparian buffer</li> <li>• In a subdivision that cumulatively disturbs equal to or less than 150 linear feet or one-third of an acre of riparian buffer</li> <li>• In a subdivision that cumulatively disturbs greater than 150 linear feet or one-third of an acre of riparian buffer</li> </ul>	X	X	X

Fences: <ul style="list-style-type: none"> <li>Fences provided that disturbance is minimized and installation does not result in removal of trees as defined in this Rule</li> <li>Fences provided that disturbance is minimized and installation results in removal of trees as defined in this Rule</li> </ul>	X		
Forest harvesting - see Item (11) of this Rule		X	
Grading and revegetation in Zone 2 only provided that diffuse flow and the health of existing vegetation in Zone 1 is not compromised and disturbed areas are stabilized	X		
Greenway / hiking trails		X	
Historic preservation	X		
Mining activities: <ul style="list-style-type: none"> <li>Mining activities that are covered by the Mining Act provided that new riparian buffers that meet the requirements of Items (4) and (5) of this Rule are established adjacent to the relocated channels</li> <li>Mining activities that are not covered by the Mining Act OR where new riparian buffers that meet the requirements of Items (4) and (5) of this Rule are not established adjacent to the relocated channels</li> </ul>		X	X
Non-electric utility lines: <ul style="list-style-type: none"> <li>Impacts other than perpendicular crossings in Zone 2 only<sup>1</sup></li> <li>Impacts other than perpendicular crossings in Zone 1<sup>1</sup></li> </ul>		X	X
Non-electric utility line perpendicular crossings of surface waters subject to this Rule <sup>1</sup> : <ul style="list-style-type: none"> <li>Perpendicular crossings that disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width</li> <li>Perpendicular crossings that disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width</li> <li>Perpendicular crossings that disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width</li> <li>Perpendicular crossings that disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width</li> <li>Perpendicular crossings that disturb greater than 150 linear feet of riparian buffer regardless of the width of the maintenance corridor</li> </ul>	X	X  X	X  X
Overhead electric utility lines: <ul style="list-style-type: none"> <li>Impacts other than perpendicular crossings in Zone 2 only<sup>1</sup></li> <li>Impacts other than perpendicular crossings in Zone 1<sup>1,2,3</sup></li> </ul>	X X		
Overhead electric utility line perpendicular crossings of surface waters subject to this Rule <sup>1</sup> : <ul style="list-style-type: none"> <li>Perpendicular crossings that disturb equal to or less than 150 linear feet of riparian buffer<sup>2</sup></li> <li>Perpendicular crossings that disturb greater than 150 linear feet of riparian buffer<sup>2,3</sup></li> </ul>	X	X	

<sup>1</sup> Perpendicular crossings are those that intersect the surface water at an angle between 75° and 105°. New water intakes and new outfall lines which may be required to extend to or cross part of waterbodies will be implemented and enforced under this category.

<sup>2</sup> Provided that, in Zone 1, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the Division.

- A minimum zone of 10 feet wide immediately adjacent to the water body shall be managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed.
- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain where trees are cut.
- Rip rap shall not be used unless it is necessary to stabilize a tower.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

<sup>3</sup> Provided that poles or towers shall not be installed within 10 feet of a water body unless the Division completes a no practical alternative evaluation.

Use	Exempt	Allowable	Allowable with Mitigation
Playground equipment: <ul style="list-style-type: none"> <li>• Playground equipment provided that installation and use does not result in removal of trees as defined in this Rule</li> <li>• Playground equipment where installation and use requires removal of trees as defined in this Rule</li> </ul>	X	X	
Properties that have been subdivided by a preliminary subdivision plat <sup>4</sup> approved by local governments within the Catawba River Basin within 2 years prior to June 30, 2001 for conventional subdivisions and within 5 years prior to June 30, 2001 for phased subdivisions: <ul style="list-style-type: none"> <li>• Uses in Zone 2 provided that the ground is stabilized and diffuse flow is maintained</li> <li>• Uses in Zone 1 provided that the ground is stabilized and diffuse flow is maintained. On-site waste systems, septic tanks and drainfields are not allowed in Zone 1</li> </ul>	X	X	
Properties that are included on a recorded subdivision plan prior to June 30, 2001: <ul style="list-style-type: none"> <li>• Uses in Zone 2 provided that the ground is stabilized and diffuse flow is maintained</li> <li>• Uses in Zone 1 provided that the ground is stabilized and diffuse flow is maintained. On-site waste systems, septic tanks and drainfields are not allowed in Zone 1</li> </ul>	X	X	
Protection of existing structures, facilities and shoreline when this requires additional disturbance of the riparian buffer or the channel		X	
Pumps for agricultural irrigation in Zone 1 provided that installation and use does not result in removal of trees as defined in this Rule	X		

<sup>4</sup> The submitted preliminary subdivision plat shall include all the following information:

- Total acreage of land proposed for platting.
- The boundaries of the tract or portion thereof to be subdivided, with all bearings and distances accurately shown, including dimensions of all lot lines.
- Location and use of all existing and proposed easements. This includes easements for drainage and utilities.
- Location, width of rights-of-way and all proposed streets.
- Location of all utilities installations.
- Distance to nearest public water supply and sanitary sewerage systems.
- Significant natural features including existing riparian buffer areas, existing wetlands, lakes or rivers, or other natural features affecting the site.
- Existing physical features including buildings, streets, railroads, power lines, drainage ways, sewer and water or spring heads, and town limit lines both to or adjacent to the land to be subdivided.

Use	Exempt	Allowable	Allowable with Mitigation
Railroad impacts other than crossings of surface waters subject to this Rule			X
Recreational and accessory structures: <ul style="list-style-type: none"> <li>• Recreational and accessory structures such as decks, gazebos and sheds provided the total cumulative footprint of all structures within the buffer does not exceed 150 square feet, that the structures are elevated above pervious ground, that installation does not result in removal of trees as defined in this Rule, and that they are not otherwise prohibited under the local water supply watershed ordinance</li> <li>• Recreational and accessory structures such as decks, gazebos, and sheds with a cumulative footprint of more than 150 square feet provided that the structures are elevated above pervious ground, that installation does not result in removal of trees as defined in this Rule, and that they are not otherwise prohibited under the local water supply watershed ordinance</li> </ul>	X		X
Removal of previous fill or debris provided that diffuse flow is maintained and any vegetation removed is restored	X		
Road impacts other than crossings of surface waters subject to this Rule			X
Road crossings of surface waters subject to this Rule: <ul style="list-style-type: none"> <li>• Road crossings that impact equal to or less than 40 linear feet of riparian buffer</li> <li>• Road crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer</li> <li>• Road crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer</li> </ul>	X	X	X
Scientific studies and gauging station	X		
Stormwater management ponds excluding dry ponds: <ul style="list-style-type: none"> <li>• New stormwater management ponds provided that a riparian buffer that meets the requirements of Items (4) and (5) of this Rule is established adjacent to the pond</li> <li>• New stormwater management ponds where a riparian buffer that meets the requirements of Items (4) and (5) of this</li> </ul>		X	X



Rule is NOT established adjacent to the pond • Stormwater constructed wetland and bio-retention area		X	
Shoreline stabilization		X	
Temporary roads: • Temporary roads that disturb less than or equal to 2,500 square feet provided that vegetation is restored within six months of initial disturbance • Temporary roads that disturb greater than 2,500 square feet provided that vegetation is restored within six months of initial disturbance • Temporary roads used for culvert installation, bridge construction or replacement provided that restoration activities, such as soil stabilization and revegetation, are conducted immediately after construction	X	X  X	
Temporary sediment and erosion control devices: • In Zone 2 only provided that the vegetation in Zone 1 is not compromised and that discharge is released as diffuse flow in accordance with Item (5) of this Rule • In Zones 1 and 2 to control impacts associated with uses approved by the Division or that have received a variance provided that sediment and erosion control for upland areas is addressed to the maximum extent practical outside the buffer • In-stream temporary erosion and sediment control measures for work within a stream channel	X   X	X	
Underground electric utility lines: • Impacts other than perpendicular crossings in Zone 2 only <sup>1</sup> • Impacts other than perpendicular crossings in Zone 1 <sup>1,5</sup>	X X		
Underground electric utility line perpendicular crossings of surface waters subject to this Rule: <sup>1</sup> • Perpendicular crossings that disturb less than or equal to 40 linear feet of riparian buffer <sup>5</sup> • Perpendicular crossings that disturb greater than 40 linear feet of riparian buffer <sup>5</sup>	X	X	
Vehicle access roads and boat ramps leading to the surface water, docks, fishing piers, and other water dependent activities: • Vehicular access roads and boat ramps to the surface water but not crossing the surface water that are restricted to the minimum width practicable not to exceed 10 feet in width • Vehicular access roads and boat ramps to the surface water but not crossing the surface water that are restricted to the minimum width practicable and exceed 10 feet in width		X	X
View corridors: • Thinning of underbrush, shrubs, and limbs up to 50% of individual tree height to enhance a lake view provided soils are undisturbed, diffuse flow is maintained and no stems of woody vegetation larger than 3" DBH are removed • Thinning of underbrush, shrubs, and limbs above 50% of individual tree height to enhance a lake view provided soils are undisturbed, diffuse flow is maintained and no stems of woody vegetation larger than 3" DBH are removed	X	X	

<sup>5</sup> Provided that, in Zone 1, all of the following BMPs for underground utility lines are used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the Division.

- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Except as specified within this footnote, vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the trench, where trees are cut.
- Underground cables shall be installed by vibratory plow or trenching.
- The trench shall be backfilled with the excavated soil material immediately following cable installation.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

Use	Exempt	Allowable	Allowable with Mitigation
Vegetation management: <ul style="list-style-type: none"> <li>• Emergency fire control measures provided that topography is restored</li> <li>• Periodic mowing and harvesting of plant products in Zone 2 only</li> <li>• Planting vegetation to improve water quality protection function of the riparian buffer</li> <li>• Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised</li> <li>• Removal of individual trees which are in danger of causing damage to dwellings, other structures or human life</li> <li>• Removal of individual trees which are dead, diseased or damaged</li> <li>• Removal of poison ivy</li> <li>• Removal of understory nuisance vegetation listed in Appendix III of: Smith, Cheri L. 1998. Exotic Plant Guidelines. Department of Environment and Natural Resources. Division of Parks and Recreation. Raleigh, NC. Guideline #30</li> </ul>	X  X  X  X  X  X  X		
Water dependent structures: <ul style="list-style-type: none"> <li>• Water dependent structures as defined in 15A NCAC 02B .0202 where installation and use do not result in disturbance to riparian buffers</li> <li>• Water dependent structures as defined in 15A NCAC 02B .0202 where installation and use result in disturbance to riparian buffers</li> </ul>	X	X	
Water wells: <ul style="list-style-type: none"> <li>• Single family residential water wells</li> <li>• All other water wells</li> </ul>	X	X	
Wetland, stream and buffer restoration that results in impacts to the riparian buffers: <ul style="list-style-type: none"> <li>• Wetland, stream and buffer restoration that requires DWQ approval for the use of a 401 Water Quality Certification</li> <li>• Wetland, stream and buffer restoration that does not require DWQ approval for the use of a 401 Water Quality Certification</li> </ul>	X	X	

- (7) **REQUIREMENTS FOR CATEGORIES OF USES.** Uses designated as exempt, allowable, and allowable with mitigation in Item (6) of this Rule and prohibited in this Rule shall have the following requirements:
- (a) **EXEMPT.** Uses designated as exempt are allowed within the riparian buffer. Exempt uses shall be designed, constructed and maintained to minimize soil disturbance and to provide the maximum water quality protection practicable. In addition, exempt uses shall meet requirements listed in Item (6) of this Rule for the specific use.
  - (b) **ALLOWABLE.** Uses designated as allowable may proceed within the riparian buffer provided that there are no practical alternatives to the requested use pursuant to Item (8) of this Rule and that disturbance to the buffer is minimized. These uses require prior written authorization from the Division or from a local government with an approved riparian buffer ordinance pursuant to Sub-Item (3)(b) of this Rule.
  - (c) **ALLOWABLE WITH MITIGATION.** Uses designated as allowable with mitigation may proceed within the riparian buffer provided that there are no practical alternatives to the requested use pursuant to Item (8) of this Rule and an appropriate mitigation strategy has been approved pursuant to Item (10) of this Rule. These uses require written authorization from the Division or the approved local government.
  - (d) **PROHIBITED.** All uses not designated as exempt, allowable or allowable with mitigation are considered prohibited and may not proceed within the riparian buffer unless a variance is granted pursuant to Item (9) of this Rule. Mitigation may be required as one condition of a variance approval.
- (8) **DETERMINATION OF "NO PRACTICAL ALTERNATIVES."** Persons who wish to undertake uses designated as allowable or allowable with mitigation shall submit a request for a "no practical alternatives" determination to the Division or to the approved local government. The applicant shall certify that the criteria identified in Sub-Item (8)(a) of this Rule are met. The Division or the approved local government shall grant an Authorization Certificate upon a "no practical alternatives" determination. The procedure for making an Authorization Certificate shall be as follows:
- (a) For any request for an Authorization Certificate, the Division or the approved local government shall review the entire project and make a finding of fact as to whether the following requirements have been met in support of a "no practical alternatives" determination:
    - (i) The basic project purpose cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat, and protect water quality.
    - (ii) The use cannot practically be reduced in size or density, reconfigured or redesigned to better minimize disturbance, preserve aquatic life and habitat, and protect water quality.
    - (iii) Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat, and protect water quality.
  - (b) Requests for an Authorization Certificate shall be reviewed and either approved or denied within 60 days of receipt of a complete submission based on the criteria in Sub-Item (8)(a) of this Rule by either the Division or the approved local government. Failure to issue an approval or denial within 60 days shall constitute that the applicant has demonstrated "no practical alternatives." An Authorization Certificate shall be issued to the applicant, unless:
    - (i) The applicant agrees, in writing, to a longer period;
    - (ii) Applicant fails to furnish requested information necessary to the Division's or approved local government's decision; or
    - (iii) Information necessary to the Division's or approved local government's decision. The Division or the approved local government may attach conditions to the Authorization Certificate that support the purpose, spirit and intent of the riparian buffer protection program. Complete submissions to the Division shall use the appropriate Pre-Construction Notification (PCN) Application Form and shall submit the completed form to the Division. Complete submissions to the delegated local government shall include the following unless otherwise identified within an approved local government ordinance:
      - (i) The name, address and phone number of the applicant;

- (ii) The nature of the activity to be conducted by the applicant;
  - (iii) The location of the activity, including the jurisdiction;
  - (iv) A map of sufficient detail to accurately delineate the boundaries of the land to be utilized in carrying out the activity, the location and dimensions of any disturbance in riparian buffers associated with the activity, and the extent of riparian buffers on the land;
  - (v) An explanation of why this plan for the activity cannot be practically accomplished, reduced or reconfigured to better minimize disturbance to the riparian buffer, preserve aquatic life and habitat and protect water quality; and
  - (vi) Plans for any best management practices proposed to be used to control the impacts associated with the activity.
- (c) Any disputes over determinations regarding Authorization Certificates shall be referred to the Director for a decision. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.
- (9) **VARIANCES.** Persons who wish to undertake uses designated as prohibited may pursue a variance. The Division or the appropriate approved local government shall make all of the following findings of fact and may grant variances. The variance request procedure shall be as follows:
- (a) For any variance request, the Division or the approved local government shall make a finding of fact to insure that the following requirements have been met:
    - (i) There are practical difficulties or hardships that prevent compliance with the riparian buffer protection requirements. Practical difficulties or unnecessary hardships shall be evaluated in accordance with the following:
      - (A) If the applicant complies with the provisions of this Rule, he or she can secure no reasonable return from, nor make reasonable use of, his or her property. Merely proving that the variance would permit a greater profit from the property shall not be considered adequate justification for a variance. Moreover, the Division or the approved local government shall consider whether the variance is the minimum possible deviation from the terms of this Rule that shall make reasonable use of the property possible.
      - (B) The hardship results from application of this Rule to the property rather than from other factors such as deed restrictions or other hardship.
      - (C) The hardship is due to the physical nature of the applicant's property, such as its size, shape, or topography, which is different from that of neighboring property.
      - (D) The applicant did not cause the hardship by knowingly or unknowingly violating this Rule.
      - (E) The hardship is unique to the applicant's property, rather than the result of conditions that are widespread. If other properties are equally subject to the hardship created in the restriction, then granting a variance would be a special privilege denied to others, and would not promote equal justice.
    - (ii) The variance is in harmony with the general purpose and intent of the Catawba River Basin's riparian buffer protection requirements and preserves its spirit; and
    - (iii) In granting the variance, the public safety and welfare have been assured, water quality has been protected, and justice has been done.
  - (b) Variance requests shall be reviewed and approved based on the criteria in Sub-Item (9)(a) of this Rule by either the Division or the approved local government pursuant to G.S. 153A, Article 18, or G.S. 160A, Article 19. The Division or the approved local government may attach conditions to the variance approval that support the purpose, spirit and intent of the riparian buffer protection program. Requests for appeals of decisions made by the Division shall be made to the Office of Administrative Hearings. Request for appeals of decisions made by the approved local government shall be made to the appropriate Board of Adjustment under G.S. 160A-388 or G.S. 153A-345 for determinations made by the approved local government.
- (10) **MITIGATION.** Persons who wish to undertake uses designated as allowable with mitigation shall meet the following requirements in order to proceed with their proposed use.

- (a) Obtain a determination of "no practical alternatives" to the proposed use pursuant to Item (8) of this Rule.
  - (b) Obtain approval for a mitigation proposal pursuant to 15A NCAC 02B .0244.
- (11) REQUIREMENTS SPECIFIC TO FOREST HARVESTING. The following requirements shall apply for forest harvesting operations and practices.
- (a) The following measures shall apply in Zone 1 of the riparian buffer:
    - (i) Logging decks and sawmill sites shall not be placed in the riparian buffer.
    - (ii) Timber felling shall be directed away from the water body.
    - (iii) Skidding shall be directed away from the water body and shall be done in a manner that minimizes soil disturbance and prevents the creation of channels or ruts in accordance with 15A NCAC 01I .0203 as enforced by the Division of Forest Resources.
    - (iv) Individual trees may be treated to maintain or improve their health, form or vigor.
    - (v) Harvesting of dead or infected trees or application of pesticides necessary to prevent or control tree pest and disease infestation shall be allowed. These practices must be approved by the Division of Forest Resources for a specific site pursuant to this Rule. The Division of Forest Resources must notify the Division of all approvals.
    - (vi) Removal of individual trees that are in danger of causing damage to structures or human life shall be allowed.
    - (vii) Natural regeneration of forest vegetation and planting of trees, shrubs, or ground cover plants to enhance the riparian buffer shall be allowed provided that soil disturbance is minimized. Plantings shall consist primarily of native species.
    - (viii) Prescribed burns shall not be allowed.
    - (ix) Application of fertilizer shall not be allowed except as necessary for permanent stabilization. Broadcast application of fertilizer or herbicides to the adjacent forest stand shall be conducted so that the chemicals are not applied directly to or allowed to drift into the riparian buffer.
  - (b) In Zone 1, forest vegetation shall be protected and maintained. Selective harvest as provided for below is allowed on forest lands that have a deferment for use value under forestry in accordance with G.S. 105-277.2 through G.S. 277.6 or on forest lands that have a forest management plan prepared or approved by a registered professional forester. Copies of either the approval of the deferment for use value under forestry or the forest management plan shall be produced upon request. For such forest lands, selective harvest is allowed in accordance with the following:
    - (i) Tracked or wheeled vehicles are not permitted except at stream crossings designed, constructed and maintained in accordance with 15A NCAC 01I .0203 as enforced by the Division of Forest Resources.
    - (ii) Soil disturbing site preparation activities are not allowed.
    - (iii) Trees shall be removed with the minimum disturbance to the soil and residual vegetation.
    - (iv) The following provisions for selective harvesting shall be met:
      - (A) The first 10 feet of Zone 1 directly adjacent to the stream or waterbody shall be undisturbed except for the removal of individual high value trees as defined.
      - (B) In the outer 20 feet of Zone 1, trees greater than 12-inch diameter stump may be cut and removed. The reentry time for harvest shall be no more frequent than every 15 years, except on forest plantations where the reentry time shall be no more frequent than every five years. In either case, the trees remaining after harvest shall be as evenly spaced as possible.
  - (c) In Zone 2, harvesting and regeneration of the forest stand shall be allowed in accordance with 15A NCAC 01I .0100 – .0200 as enforced by the Division of Forest Resources.

- (12) OTHER LAWS, REGULATIONS AND PERMITS. In all cases, compliance with this Rule does not preclude the requirement to comply with all federal, state and local regulations and laws. Whichever regulation is more restrictive shall apply.

*History Note: Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1999, c. 329, s. 7.1; S.B 824-2003; Temporary Adoption Eff. June 30, 2001; (exempt from 270 day requirement - S.L. 2001-418 & S.L. 2003-340). Eff. August 1, 2004.*