



Agenda Abstract PLANNING BOARD

Meeting Date:	December 21, 2023
Department:	Stormwater and Environmental Services
Agenda Section:	5A
Public hearing:	Yes
Date of public hearing:	January 18, 2024 (tentative)

PRESENTER/INFORMATION CONTACT

Terry Hackett, Stormwater and Environmental Services Manager

ITEM TO BE CONSIDERED

Subject: Unified Development Ordinance (UDO) text amendment (Staff Initiated):

- Section 3.10.3 *Variance – General Standards/Findings of Fact*
- Section 3.10.6 *Variance – Procedure*
- Section 6.20.16 *Stormwater Management - Riparian Buffers*

Attachments:

1. Background and summary of proposed changes
2. UDO sections referenced above, as proposed to be amended

Comprehensive Sustainability Plan goals:

- Environment and Natural Systems Goal 1: Employ an integrated ecosystem approach and stewardship mentality to protect, conserve, and restore critical environmental areas and natural systems.
- Strategy: Develop and participate in programs that contribute to sustained ecological health of the environment and natural systems (delegated local authority from the state to enforce the Neuse Riparian Buffer Rules)

Financial impacts:

None.

Staff recommendation and comments:

Send the proposed text amendment to the joint public hearing on January 18, 2024, after which the Planning Board may make a recommendation to approve the amendment.

Action requested:

Send the proposed text amendment to the joint public hearing on January 18, 2024.

Background

The Town of Hillsborough has local delegated authority from the state to enforce the Neuse Riparian Buffer Rules (15A NCAC 02B .0714 Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Protection and Maintenance of Existing Riparian Buffers) within the town’s planning jurisdiction. The town’s Stormwater and Environmental Services Division staff administer and enforce the riparian buffer program through *Section 6.20.16, Riparian Buffers*, of the town’s Unified Development Ordinance (UDO).

The town received delegated authority in 2013 and has not made significant changes to *Section 6.20.16* since then. There was a legislative session law in 2016 that attempted to force local governments to be no more restrictive than the state’s rules. That prompted an update to *Section 6.20.16* of the UDO, but in the end the North Carolina Department of Environmental Quality (NCDEQ) determined that this session law did not apply to local riparian buffer programs like Hillsborough’s.

In 2020, the state updated the Neuse Riparian Buffer Rules including redefining the category of uses in the riparian buffer and expanding the table of allowable uses. Since that time Stormwater and Environmental Services Division staff have been reviewing the state’s updated riparian buffer rules and how the town’s riparian buffer plan is implemented.

Current Request

Stormwater and Environmental Services Division and Planning and Economic Development Division staff have been contacted by two property owners within town limits regarding text amendments to *Section 6.20.16* of the UDO. This, coupled with staff’s review of the town’s riparian buffer regulations in the UDO has prompted staff to propose amendments to *Section 6.20.16*. The reasons for the proposed changes include:

- Provide flexibility to staff in enforcing riparian buffers by expanding uses which include more specific requirements and conditions;
- Itemize more uses with specific impact thresholds; this will provide equal or better protection because allowable impacts with specific thresholds are more enforceable;
- Update “diffuse flow” of stormwater requirements to meet current state rules regarding stormwater runoff through the riparian buffer; this will provide better protection to receiving streams and improve enforceability of the runoff requirements;
- Provide “equality” between town impacts and private citizens or developers; currently, the town riparian buffer activities/impacts are governed by the current state rules. We do not “self permit” our own buffer impacts;
- Residential infill lots have garnered a lot of attention; many of these have streams and without some flexibility cannot easily be developed;
- Correct references and typographical errors.

It is important to note that staff intends to keep what is referred to as the “kick-in” clause. In *Section 6.20.16.3.c* of the UDO, even an unmapped stream may require a riparian buffer if field evidence indicates a stream is present. This is more restrictive than the state’s rules. The state only applies riparian buffers to mapped streams, unless field evidence indicates they are not present. Given climate change impacts, staff has documented that the hydrology of streams—especially intermittent streams—does change. Keeping this section intact helps to protect stream quality throughout the town’s jurisdiction.

Proposed Riparian Buffer Rule Changes



The proposed changes to Section 6.20 includes a stipulation that only prohibited uses can seek a variance and that variance must be granted by the North Carolina Environmental Management Commission. Therefore staff is also proposing changes to Section 3.10 of the town’s UDO to reflect the separate variance process.

Proposed Changes

The following table summarizes the proposed changes to Section 6.20.16 of the town’s UDO.

Table of Proposed Riparian Buffer UDO Changes

UDO Section 6.20.16 Riparian Buffers		Change
6.20.16.1	Purpose and Intent	Changed the reference to the Nuese Buffer rules to the new citation
6.20.16.2	Delegated Authority	None
6.20.16.3	Applicability	Changed the reference from NC Division of Water Quality to the NC Department of Environmental Quality to reflect the department's name change.
6.20.16.4	Exemption Based upon an On-site Determination	Changed the reference from NC Division of Water Quality to the NC Department of Environmental Quality to reflect the department's name change. Also corrected the reference to the O2B rules and fixed a typo.
6.20.16.5	Exemption when Existing Uses are Present and Ongoing	Changed the reference to the new citation
6.20.16.6	Calculations for Width of Riparian Buffers	Minor changes made to reference how the buffer is measured for each zone as described in new Section 6.20.16.7.
6.20.16.7	Zones of the Riparian Buffer	Added new section to define Zone 1 and 2. In practice Zone 1 gets more protection and staff has been utilizing the zones, especially for buffer authorization and determination of mitigation. Makes sense to now include the definitions which are needed for the updated table of uses.
6.20.16.8	Permitted Uses within Riparian Buffers Table 6.20.16.8 Permitted Uses/Activities within Riparian Buffers	Section was modified to include DEQ's use definitions. Added new table of uses/activities to essentially match the current DEQ rules with a few exceptions.
6.20.16.9	Basis for “No Practical Alternatives”	Added the reference to the permitted use section.
6.20.16.10	Written Authorization Required	Added the reference to the permitted use section.

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Table of Proposed Riparian Buffer UDO Changes (continued)

UDO Section 6.20.16 Riparian Buffers		Change
6.20.16.11	Stormwater Runoff Through the Riparian Buffer	This section was previously titled, "Diffuse Flow Requirement," and has been replaced with new language from DEQ's regulations. This section is more protective but defines when stormwater conveyances through the buffer are allowed which generally requires meeting nutrient thresholds and other requirements. This will be much more enforceable.
6.20.16.12	Mitigation	Changed the reference to the permitted use section.
6.20.16.13	Riparian Buffer and Minimum Lot Requirements	None.
6.20.16.14	Existing Vegetation and New Vegetation in Riparian buffers	Deleted because the new table of uses, details vegetative management allowed in the riparian buffer and this section is no longer needed.

The following table summarizes the proposed changes to Section 3.10 of the town's UDO.

Table of Proposed Variance UDO Changes

UDO Section 3.10. Variance		Change
3.10.3.1	Findings of Fact	Changed to reflect that riparian buffer variances have their own requirements.
3.10.3.3	Riparian Buffer Variance Findings	Changed to show that riparian buffer variances only go to the NC EMC.
3.10.3.4	Minor and Major Variances	Deleted since this no longer applies to riparian buffers
3.10.6.4	Notice of Public Hearing	Minor clarification
3.10.6.5.b	Board of Adjustment Determination	Deleted, no longer needed.

3.10 VARIANCE

3.10.3 GENERAL STANDARDS/FINDINGS OF FACT

3.10.3.1 A Variance from all provisions of this Ordinance, with the exception of Section 4.5.1, *Upper Eno Watershed District*; Section 4.5.2, *Upper Eno Protected Watershed, Critical Area District* and Section 6.20.16, *Riparian Buffers* (which contain their own separate ~~findings-required~~ requirements to receive a variance), shall be approved only upon a finding that all of the following standards are met:

3.10.3.3 RIPARIAN BUFFER VARIANCES FINDINGS

Variances ~~from the provisions of Section 6.20.16, *Riparian Buffers*~~, shall be approved ~~only upon a finding that all of the following standards are met:~~ by the North Carolina Environmental Management Commission on a case by case basis pursuant to 15A NCAC 02B .0226.

~~**3.10.3.3.a** There are practical difficulties or unnecessary hardships that prevent compliance with the strict letter of 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 the riparian buffer protection requirements, he/she can secure no reasonable return from, nor make reasonable use of, his/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 Board shall consider whether the variance is the minimum possible deviation from the terms of the buffer requirements that shall make reasonable use of the property possible.~~
- ~~(b) The hardship results from application of the riparian buffer protection rules 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 the riparian buffer protection requirements.~~
- ~~(e) The applicant did not purchase the property after the effective date of the riparian buffer protection requirements (July 22, 1997), and then requesting a variance.~~
- ~~(f) 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.~~

~~**3.10.3.3.b** The variance is in harmony with the general purpose and intent of the riparian buffer protection requirements and preserves their spirit, and~~

~~**3.10.3.3.c** In granting the variance, the public safety and welfare have been assured,~~

~~water quality has been protected, and substantial justice has been done.~~

~~3.10.3.4 MINOR AND MAJOR VARIANCES~~

~~A minor variance request pertains to activities that are proposed only to impact any portion of Zone 2 of the riparian buffer. Zone 2 begins at the outer edge of Zone 1 and extends landward 20 feet as measured horizontally on a line perpendicular to the surface water.~~

~~A major variance request pertains to activities that are proposed to impact any portion of Zone 1 or any portion of both Zones 1 and 2 of the riparian buffer. For intermittent and perennial streams, Zone 1 begins at the most landward limit of the top of bank or the rooted herbaceous vegetation and extends landward a distance of 30 feet on all sides of the surface water, measured horizontally on a line perpendicular to the surface water. For ponds, lakes and reservoirs located within a natural drainage way, Zone 1 begins at the most landward limit of the normal water level or the rooted herbaceous vegetation and extends landward a distance of 30 feet, measured horizontally on a line perpendicular to the surface water. The combined width of Zones 1 and 2 is 50 feet on all sides of the surface water.~~

~~Additional requirements for processing of major variances are found in Section 3.10.6.5.b.~~

3.10.6 PROCEDURE

3.10.6.4 Notice of Public Hearing

Written notice shall be mailed to the aggrieved person (applicant), property owner involved in original case being appealed (if different), to the owners of all parcels of land abutting the parcel of land that is subject to the evidentiary hearing (including those across a public or private street), to any other persons entitled to receive notice as provided by this Ordinance. The notice must be deposited in the mail at least ten (10) days, but not more than twenty-five (25) days before the hearing date. In computing such period, the day of publication is not to be included but the day of the hearing shall be included.

A notice of the request shall be placed on the site that is subject to the hearing or on an adjacent street or highway right-of-way at least ten (10) days, but not more than twenty-five (25) days before the hearing date.

In cases where a variance is requested from the provisions of Section 4.5.1, Upper Eno Watershed District; Section 4.5.2, ~~Upper Eno Protected Watershed, Critical Area District~~ Upper Eno Protected Watershed, Critical Area District of this Ordinance, all local governments having jurisdiction within the watershed area and the entity using the water supply for consumption shall be notified of the proposed variance. Comments from these entities shall be submitted to the Planning Director before the Board of Adjustment decision and shall be made a part of the record of the Board of Adjustment decision.

3.10.6.5 Public Hearing

~~3.10.6.5.b If the Board of Adjustment determines that a major variance request meets the requirements in Section 3.10.3.3, Riparian Buffer Variance Findings, then it~~

~~shall prepare a preliminary finding and submit it to the State Environmental Management Commission. Preliminary findings on major variance requests shall be reviewed by the Commission within 90 days after receipt by the Director. The purpose of the Commission's review is to determine if it agrees that the requirements for granting of a variance have been met. Requests for appeals of decisions made by the Commission shall be made to the Office of Administrative hearings. The following actions shall be taken depending on the Commission's decision on the major variance request:~~

- ~~(a) Upon the Commission's approval, the Board of Adjustment shall issue a final decision granting the major variance.~~
- ~~(b) Upon the Commission's approval with conditions or stipulations, the Board of Adjustment shall issue a final decision, which includes these conditions or stipulations.~~
- ~~(c) Upon the Commission's denial, the Board of Adjustment shall issue a final decision denying the major variance.~~

6.20 STORMWATER MANAGEMENT

6.20.16 RIPARIAN BUFFERS

6.20.16.1 Purpose and Intent

In order to minimize sedimentation and pollution of surface waters within the planning jurisdiction, riparian buffers shall be provided along all surface waters identified in *Section 6.20.16.3, Applicability*. Undisturbed natural areas along surface waters act as a filter for sedimentation control and as a stabilizing agent for the banks of surface waters. In addition, these areas filter storm water run-off which may carry significant amounts of bacteria, excess nutrients and heavy metals into surface waters. The buffer areas, along with controls on impervious surfaces, provide a good measure of water quality protection for the Eno River.

The Neuse River Basin Nutrient Sensitive Waters Management Strategy riparian buffer protection rules (Neuse Rules) of 15A NCAC ~~028-0233 and 0241~~ 02B .0714, apply to all lands within the Town of Hillsborough's planning jurisdiction. Wherever standards of the Neuse Rules and the standards listed in this ordinance differ, the more restrictive provisions shall apply.

6.20.16.3 Applicability

6.20.16.3.c A surface water identified in a field determination made by staff trained in surface water identification through the North Carolina ~~Division of Water Quality (NCDWQ)~~ Department of Environmental Quality (NCDEQ). Disputes pertaining to water feature decisions by staff shall be filed directly to the Director of ~~NCDWQ~~ NCDEQ.

6.20.16.4 Exemption Based upon an On-site Determination

When a landowner or other affected party including ~~the Division~~ NCDEQ believes that the maps inaccurately depict surface waters, they may request an On-site determination conducted by staff who has successfully completed the ~~Division's~~ NCDEQ's Surface Water Identification Training Certification course, its successor, or other equivalent training curriculum approved by ~~the Division~~ NCDEQ. Any disputes over on-site determinations shall be referred to the Director of ~~the Division of Water Resources~~ NCDEQ in writing. A determination of the Director of ~~the Division of Water Resources~~ NCDEQ as to the accuracy or application of the maps is subject to review as provided in articles 3 and 4 of G.S. 150B. Surface waters that appear on the maps shall not be subject to ~~this Rule~~ Section 6.20.16, Riparian Buffers is a site evaluation ~~revels~~ reveals any of the following cases:

6.20.16.4.a Man-made ponds and lakes that are not part of a natural drainage way that is classified in accordance with 15A NCAC ~~02B-0110~~ 02B .0101, including ponds and lakes created for animal watering, irrigation, or other agricultural uses. A pond or lake is part of a natural drainage way when it is fed by an intermittent or perennial stream or when it has a direct discharge point to an intermittent or perennial stream.

6.20.16.5 Exemption when Existing Uses are Present and Ongoing

Section 6.20.16, Riparian Buffers does not apply to portions of the riparian buffer where a use is considered existing and ongoing according in accordance with 15A NCAC ~~028-0233 (3)~~

02B .0714 (6) (a). A use is considered existing if it was present within the riparian buffer as of July 22, 1997. Existing uses shall include, but not be limited to, agriculture, buildings, industrial facilities, commercial areas, transportation facilities, maintained lawns, utility lines and on-site sanitary sewage systems. Only the portion of the riparian buffer that contains the footprint of the existing use is exempt from ~~this Rule~~ Section 6.20.16, Riparian Buffers.

6.20.16.6 Calculations for Width of Riparian Buffers

~~The width of the buffer along the Eno River shall be the floodway as shown on the Floodway Map from the National Flood Insurance Program, plus fifty (50) feet. However, in no case, shall the riparian buffer exceed the outer line of the floodplain as shown on the Flood Insurance Rate Map (FIRM) of the National Flood Insurance Program.~~

A buffer of fifty (50) feet in width as defined in Section 6.20.16.7 is required on all sides of the surface water as identified in Section 6.20.16.3, Applicability. For streams within the PW and PWCA zoning districts (see *Section 4.5, Other Zoning Districts*), the width of the stream is calculated as outlined in *Section 4.5.3.8.d, Calculating Width of Riparian Buffer*.

~~In all other cases, a buffer of fifty (50) feet in width measured from the most landward limit of the top of bank, normal water level or rooted herbaceous vegetation of surface waters identified in Section 6.20.16.3, Applicability.~~

6.20.16.7 Zones of the Riparian Buffer

6.20.16.7.a Zone 1 shall consist of a vegetated area that is undisturbed except for uses provided for in sections 6.20.16.8, Permitted Uses within Riparian Buffers and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer. The location of Zone 1 shall be as follows:

- (i) For intermittent and perennial streams, Zone 1 shall begin at the most landward limit of the top of bank or the rooted herbaceous vegetation and extend landward a distance of 30 feet on all sides of the stream, measured horizontally on a line perpendicular to the stream (where an intermittent or perennial stream begins or ends, including when it goes underground, enters or exits a culvert, or enters or exits a wetland, the required distance shall be measured as a radius around the beginning or the end).
- (ii) For ponds, lakes and reservoirs, Zone 1 shall begin at the normal water level and extend landward a distance of 30 feet, measured horizontally on a line perpendicular to the surface water.

6.20.16.7.b Zone 2 shall consist of a stable, vegetated area that is undisturbed except for activities and uses provided for in sections 6.20.16.8, Permitted Uses within Riparian Buffers and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer. 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 the surface water. The combined width of Zones 1 and 2 shall be 50 feet on all sides of the surface water.

~~6.20.16.76.20.16.8~~ **Permitted Uses Within Riparian Buffers**

~~It is the intent of this section to restrict the use of land adjacent to streams, ponds, lakes and reservoirs in order to reduce sedimentation and pollution. The following uses are permitted within a designated riparian buffer. All other land uses are prohibited.~~

~~Uses within the riparian buffer, or outside the riparian buffer with hydrological impacts on the riparian buffer, shall be designated as deemed allowable, allowable upon authorization, allowable with mitigation upon authorization, allowable with exception or prohibited. Potential new uses shall have the following requirements.~~

~~**6.20.16.8.a Deemed Allowable.** Uses designated as deemed allowable in *Table 6.20.16.8 Permitted Uses within Riparian Buffers* and *6.20.16.11 Stormwater Runoff Through the Riparian Buffer* may occur within the riparian buffer. Deemed allowable uses shall be designed, constructed and maintained to minimize vegetation and soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities. In addition, deemed allowable uses shall meet all requirements listed in *Table 6.20.16.8 Permitted Uses within Riparian Buffers* for the specific use.~~

~~**6.20.16.8.b Allowable Upon Authorization.** Uses designated as allowable upon authorization in *Table 6.20.16.8 Permitted Uses within Riparian Buffers* and *6.20.16.11 Stormwater Runoff Through the Riparian Buffer* require a written Authorization Certificate for impacts within the riparian buffer pursuant to *Section 6.20.16.9, Basis for “No Practical Alternatives”* and *Section 6.20.16.10, Written Authorization Required*.~~

~~**6.20.16.8.c Allowable with Mitigation Upon Authorization.** Uses designated as allowable with mitigation upon authorization in *Table 6.20.16.8 Permitted Uses within Riparian Buffers* require a written Authorization Certificate for impacts within the riparian buffer pursuant to *Section 6.20.16.9, Basis for “No Practical Alternatives”* and *Section, 6.20.16.10 Written Authorization Required*. In addition, an appropriate mitigation strategy is required pursuant to *Section 6.20.16.12, Mitigation*.~~

~~**6.20.16.8.d Prohibited.** Uses designated as prohibited in *Table 6.20.16.8, Permitted Uses within Riparian Buffers* may not proceed within the riparian buffer unless a variance is granted by the North Carolina Environmental Management Commission pursuant to 15A NCAC 02B .0226. Mitigation may be required as a condition of variance approval.~~

Table 6.20.16.7 Permitted Uses within Riparian Buffers

Riparian Buffer Use		Allowable	Allowable w/Mitigation
Utilities	Perpendicular crossings of above-ground and buried utility lines for local distribution of electricity, telephone, and cable television service, plus accessory and appurtenant apparatus such as poles, guy wires, transformers, and switching boxes, with a construction width of less than or equal to 40 feet and a 10-foot maintenance corridor.	X	
	Perpendicular utility crossings that exceed 40 feet of construction width and/or require more than a 10-foot maintenance corridor through the riparian buffer.		X
	Non-perpendicular riparian buffer impacts for utilities.		X
Water and Sewer	Perpendicular crossings of water and sewage distribution, collection, and treatment facilities, but not private in-ground sewage disposal facilities, with a construction width of less than or equal to 40 feet and a 10-foot maintenance corridor.	X	
	Perpendicular water and sewage crossings that exceed 40 feet of construction width and/or require more than a 10-foot maintenance corridor through the riparian buffer.		X
	Non-perpendicular riparian buffer impacts for public water and sewage distribution.		X
	Water wells	X	
Streets and Bridges	Perpendicular crossings of streets, bridges, and railroad rights-of-way impacting less than 150 feet of riparian buffer.	X	
	Perpendicular crossings of streets, bridges, and railroad rights-of-way that exceed 150 feet of riparian buffer impact.		X
	Temporary access roads disturbing less than 2,500 square feet of riparian buffer provided vegetation is restored within six months of initial disturbance.	X	
	Temporary roads disturbing more than 2,500 square feet of riparian buffer.		X
	Non-perpendicular riparian buffer impacts of streets and railroad rights-of-way		X

Riparian Buffer Use		Allowable	Allowable w/Mitigation
Restoration	Stream restoration and/or stream bank stabilization.	X	
	Wetland restoration, in accordance with all applicable local, State and Federal regulations.	X	
	Removal of previous fill or debris provided that diffuse flow is maintained and any vegetation removed is restored.	X	
Stormwater Facilities	Maintenance of existing stormwater outfalls provided they are managed to minimize the sediment, nutrients, and other pollution they convey to waterbodies.	X	
	New drainage outfalls provided that a stormwater management facility is installed to control nutrients and attenuate flow before the conveyance discharges into the riparian buffer.		X
	Engineered stormwater ponds, bioretention and wetlands provided that a riparian buffer meeting the requirements of Section 6.20.16.3 is established.	X	
	Engineered stormwater ponds, bioretention and wetlands where a riparian buffer cannot be established in accordance with Section 6.20.16.3.		X
Maintenance	Drainage of a pond in a natural drainage way provided that a new riparian buffer that meets the requirements of Section 6.20.16.6 is established adjacent the new channel.	X	
	Maintenance activities of existing dams	X	
	Periodic maintenance of modified natural streams	X	
	Protection of existing structures, facilities and streambanks when this requires additional disturbance of the riparian buffer or the stream channel	X	
Miscellaneous	Greenways	X	
	Archeological research and excavation	X	
	Scientific studies and stream gauging	X	
	Fences provided that disturbance is minimized and existing trees and woody vegetation is not disturbed during installation and maintenance	X	
	Ponds in natural drainage ways (excluding dry ponds) provided that a riparian buffer meeting the requirements of Section 6.20.16.3 is established	X	
	Ponds in natural drainage ways (excluding dry ponds) where a riparian buffer cannot be established in accordance with Section 6.20.16.3		X
	Water dependent structures as defined in 15A NCAC 2B .0202	X	

Table 6.20.16.8 Permitted Uses within Riparian Buffers

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
a) <u>Archaeological activities</u>	X			
b) <u>Bridges:</u>				
i) <u>Impact equal to or less than one-tenth of an acre of riparian buffer</u>	X			
ii) <u>Impact greater than one-tenth of an acre of riparian buffer</u>		X		
c) <u>Dam maintenance activities:</u>				
i) <u>Dam maintenance activities that do not cause additional riparian buffer disturbance beyond the footprint of the existing dam</u>	X			
ii) <u>Dam maintenance activities that do cause additional riparian buffer disturbance beyond the footprint of the existing dam</u>		X		
d) <u>Drainage of a pond subject to Section 6.20.16.3, Applicability provided that a new riparian buffer is established by natural regeneration or planting, within 50 feet of any stream which naturally forms or is constructed within the drained pond area. Drained ponds shall be allowed to naturalize for a minimum of six months from completion of the draining activity before a stream determination is conducted pursuant to Section 6.20.16.3.c.</u>	X			
e) <u>Fences:</u>				
i) <u>Fencing livestock out of surface waters</u>	X			
ii) <u>Installation does not result in removal of trees from Zone 1</u>	X			
iii) <u>Installation results in removal of trees from Zone 1</u>		X		
f) <u>Fertilizer application:</u>				
i) <u>One-time fertilizer application at agronomic rates in the riparian buffer to establish replanted vegetation. No runoff from this one-time application in the riparian buffer is allowed in the surface water</u>	X			
ii) <u>Ongoing fertilizer application</u>				X
g) <u>Grading only in Zone 2 provided that the health of existing vegetation in Zone 1 is not compromised, Section 6.20.16.11, Stormwater Through the Riparian Buffer is complied with, and disturbed areas are stabilized and revegetated</u>		X		

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
<u>h) Greenways, trails, sidewalks or linear pedestrian/bicycle transportation systems:</u>				
<u>i) In Zone 2 provided that no built-upon area is added within the riparian buffer</u>	X			
<u>ii) In Zone 1 provided that no built-upon area is added within the riparian buffer and the installation does not result in the removal of tree(s)</u>	X			
<u>iii) When built-upon area is added to the riparian buffer, equal to or less than 10 feet wide with two foot wide shoulders. Shall be located outside Zone 1 unless there is no practical alternative</u>		X		
<u>iv) When built-upon area is added to the riparian buffer, greater than 10 feet wide with two foot wide shoulders. Shall be located outside Zone 1 unless there is no practical alternative</u>			X	
<u>i) Historic preservation</u>	X			
<u>j) New Landfills as defined by NC G.S. 130A-290</u>				X
<u>k) Mining activities:</u>				
<u>i) Mining activities that are covered by the Mining Act provided that new riparian buffers that meet the requirements in sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer are established adjacent to any relocated channels</u>		X		
<u>ii) Mining activities that are not covered by the Mining Act OR where new riparian buffers that meet the requirements in sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer are not established</u>			X	
<u>iii) Wastewater or mining dewatering wells with approved NPDES permit</u>	X			
<u>l) On-site sanitary sewage systems - new ones that use ground absorption</u>				X
<u>m) Pedestrian access trails and associated steps leading to a surface water, dock, canoe or kayak access, fishing pier, boat ramp or other water dependent structure:</u>				
<u>i) Equal to or less than six feet wide that does not result in the removal of tree(s) within the riparian buffer and does not result in the addition of built-upon area to the riparian buffer</u>	X			
<u>ii) Equal to or less than six feet wide that results in the removal of tree(s) or the addition of built-upon area to the riparian buffer</u>		X		
<u>iii) Greater than six feet wide</u>			X	

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
n) <u>Playground equipment:</u>				
i) <u>Playground equipment on single-family lots provided that installation and use does not result in removal of vegetation</u>	X			
ii) <u>Playground equipment on single-family lots where installation or use results in the removal of vegetation</u>		X		
iii) <u>Playground equipment installed on lands other than single-family lots</u>		X		
o) <u>Ponds created or modified by impounding streams subject to riparian buffers pursuant to Section 6.20.16.3, Applicability and not used as stormwater control measures (SCMs):</u>				
i) <u>New ponds provided that a riparian buffer that meets the requirements of sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is established adjacent to the pond</u>		X		
ii) <u>New ponds where a riparian buffer that meets the requirements of sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is NOT established adjacent to the pond</u>			X	
p) <u>Protection of existing structures and facilities when this requires additional disturbance to the riparian buffer</u>		X		
g) <u>Public Safety - Publicly owned spaces where it has been determined by the head of the local law enforcement agency with jurisdiction over that area that the riparian buffers pose a risk to public safety. The head of the local law enforcement agency shall notify the local government with land use jurisdiction over the publicly owned space and the Division of Water Resources of any such determination in writing</u>	X			
r) <u>Removal of previous fill or debris provided that Section 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is complied with and any vegetation removed is restored</u>		X		

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
<u>s) Residential Properties: Where application of this Rule would preclude construction or expansion of a single-family residence and necessary infrastructure, the single-family residence may encroach in the buffer if all of the following conditions are met: (1) the residence is set back the maximum feasible distance from the top of the bank, rooted herbaceous vegetation, normal high-water level, or normal water level, whichever is applicable, on the existing lot; (2) the residence is designed to minimize encroachment into the riparian buffer; (3) the residence complies with <i>Section 6.20.16.11, Stormwater Runoff Through the Riparian Buffer</i>; and (4) if the residence will be served by an on-site wastewater system, no part of the septic tank or drainfield may encroach into the riparian buffer:</u>				
<u>i) The residence or necessary infrastructure only impact Zone 2</u>		X		
<u>ii) The residence or necessary infrastructure impact Zone 1</u>			X	
<u>iii) Impacts other than the residence or necessary infrastructure</u>			X	
<u>t) Restoration or enhancement (wetland, stream) as defined in 33 CFR Part 332 available free of charge on the internet at: http://water.epa.gov/lawsregs/guidance/wetlands/wetlandsmitigation_index.cfm:</u>				
<u>i) Wetland or stream restoration is part of a compensatory mitigation bank, nutrient offset bank, or the In Lieu Fee program</u>	X			
<u>ii) Wetland or stream restoration other than those listed above</u>		X		
<u>u) Road, driveway or railroad - impacts other than perpendicular crossings of streams and other surface waters subject to this Rule</u>			X	
<u>v) Road, driveway or railroad - perpendicular crossings of streams and other surface waters subject to this Rule</u>				
<u>i) Impact equal to or less than one-tenth of an acre of riparian buffer</u>	X			
<u>ii) Impact greater than one-tenth of an acre but equal to or less than one-third of an acre of riparian buffer</u>		X		
<u>iii) Impact greater than one-third of an acre of riparian buffer</u>			X	
<u>iv) Driveway crossings in a residential subdivision that cumulatively impact equal to or less than one-third of an acre of riparian buffer</u>		X		

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
v) <u>Driveway crossings in a residential subdivision that cumulatively impact greater than one-third of an acre of riparian buffer</u>			X	
vi) <u>Farm roads and forest roads that are exempt from permitting from the U.S. Army Corps of Engineers per Section 404(f) of the Federal Clean Water Act</u>	X			
w) <u>Road relocation of existing private access roads associated with public road projects where necessary for public safety:</u>				
i) <u>Less than or equal to 2,500 square feet of riparian buffer impact</u>		X		
ii) <u>Greater than 2,500 square feet of riparian buffer impact</u>			X	
x) <u>Scientific studies and stream gauging</u>	X			
y) <u>Slatted uncovered decks, including steps and support posts, which are associated with a dwelling, provided that it meets the requirements of sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer and:</u>				
i) <u>Installation does not result in removal of vegetation in Zone 1</u>		X		
ii) <u>Installation results in removal of vegetation in Zone 1</u>			X	
z) <u>Stormwater Control Measure (SCM) as defined in 15A NCAC 02H .1002:</u>				
i) <u>In Zone 2 if Section 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is complied with</u>		X		
ii) <u>Installation results in removal of vegetation in Zone 1</u>			X	
aa) <u>Streambank or shoreline stabilization</u>		X		
bb) <u>Temporary roads, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions and replanted with comparable vegetation within two months of when construction is complete. Tree planting may occur during the dormant season. At the end of five years, any restored wooded riparian buffer shall comply with the restoration criteria in 15A NCAC 02B .0295:</u>				
i) <u>Less than or equal to 2,500 square feet of riparian buffer disturbance</u>	X			
ii) <u>Greater than 2,500 square feet of riparian buffer disturbance</u>		X		
iii) <u>Associated with culvert installation or bridge construction or replacement</u>		X		

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
cc) <u>Temporary sediment and erosion control devices provided that the disturbed area is restored to preconstruction topographic and hydrologic conditions and replanted with comparable vegetation within two months of when construction is complete. Tree planting may occur during the dormant season. At the end of five years, any restored wooded riparian buffer shall comply with the restoration criteria in 15A NCAC 02B .0295:</u>				
i) <u>In Zone 2 provided that ground cover is established within the timeframes required by the Sedimentation and Erosion Control Act, vegetation in Zone 1 is not compromised, and that discharge is released in accordance with Section 6.20.16.11, Stormwater Runoff Through the Riparian Buffer</u>	X			
ii) <u>In Zones 1 and 2 to control impacts associated with uses identified in this table or uses that have received an Authorization Certificate with Exception provided that sediment and erosion control for upland areas is addressed outside the riparian buffer</u>		X		
iii) <u>In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Sections 401 and 404 of the Federal Clean Water Act</u>	X			
dd) <u>Utility Lines - Streambank stabilization for the protection of publicly owned utility lines (not including new line installation):</u>				
i) <u>Less than 150 feet of streambank disturbance</u>	X			
ii) <u>Greater than 150 feet of streambank disturbance</u>		X		
ee) <u>Utility – Sewer lines – Sanitary Sewer Overflows:</u>				
i) <u>Emergency sanitary sewer overflow response activities, provided that the disturbed area within the riparian buffer outside of the existing utility line maintenance corridor is the minimum necessary to respond to the emergency overflow, is restored to pre-construction topographic and hydrologic conditions, and is replanted with comparable vegetation (e.g. grass with grass, hardwoods with hardwoods) within two months of when disturbance is complete</u>	X			
ii) <u>Emergency sanitary sewer overflow response activities that do not meet the listing above. For any new proposed permanent impacts that are not a "Deemed Allowable" activity, an application for an Authorization Certificate shall be submitted to the Authority no later than 30 calendar days of conclusion of the emergency response activities</u>		X		

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
ff) <u>Utility - Sewer Lines – Vegetation maintenance activities that remove forest vegetation from existing sewer utility right of ways (not including new line installation) outside of the existing utility line maintenance corridor:</u>				
i) <u>Zone 2 impacts</u>	X			
ii) <u>Zone 1 impacts: For lines that have not been maintained, the vegetation can be mowed, cut or otherwise maintained without disturbance to the soil structure for a maintenance corridor that is equal to or less than 30 feet wide</u>	X			
iii) <u>Zone 1 impacts other than those listed above</u>		X		
gg) <u>Utility - Sewer Lines –Replacement/Rehabilitation of existing sewer lines within, or adjacent to, an existing right of way but outside of an existing utility line maintenance corridor provided that comparable vegetation (e.g. grass with grass, hardwoods with hardwoods) is allowed to regenerate in disturbed riparian buffers outside of the permanent maintenance corridor and riparian buffers outside of the permanent maintenance corridor are not maintained:</u>				
i) <u>Permanent maintenance corridor equal to or less than 30 feet wide provided there is no grading and/or grubbing within 10 feet of the top of bank when the sewer line is parallel to the stream</u>	X			
ii) <u>Grading and/or grubbing within 10 feet of the top of bank when the sewer line is parallel to the stream and permanent maintenance corridor equal to or less than 30 feet wide</u>		X		
iii) <u>Permanent maintenance corridor greater than 30 feet wide. For impacts other than perpendicular crossings, mitigation is only required for Zone 1 impacts. For perpendicular crossings that disturb equal to or less than 40 linear feet, no mitigation is required. For perpendicular crossings that disturb greater than 40 linear feet, mitigation is only required for Zone 1 impacts</u>			X	
hh) <u>Utility - Sewer Lines – New Line Construction/Installation Activities – Perpendicular crossings of streams and other surface waters subject to Section 6.20.16, or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to Section 6.20.16, provided that vegetation is allowed to regenerate in disturbed areas outside of the permanent maintenance corridor:</u>				
i) <u>Construction corridor of less than or equal to 40 linear feet wide and a permanent maintenance corridor that is equal to or less than 30 feet wide</u>	X			

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
<u>ii) Construction corridor of greater than 40 linear feet wide and less than or equal to 150 linear feet wide and a permanent maintenance corridor that is equal to or less than 30 feet wide</u>		X		
<u>iii) Construction corridor of greater than 150 linear feet wide and a permanent maintenance corridor that is equal to or less than 30 feet wide</u>			X	
<u>iv) Permanent maintenance corridor greater than 30 feet wide. For impacts other than perpendicular crossings, mitigation is only required for Zone 1 impacts. For perpendicular crossings that disturb equal to or less than 40 linear feet, no mitigation is required. For perpendicular crossings that disturb greater than 40 linear feet, mitigation is only required for Zone 1 impacts</u>			X	
<u>ii) Utility - Sewer Lines – New Line Construction/Installation Activities – Impacts other than perpendicular crossings provided that vegetation is allowed to regenerate in disturbed areas outside of the permanent maintenance corridor:</u>				
<u>i) Zone 2 impacts</u>	X			
<u>ii) Zone 1 impacts to less than 2,500 square feet when impacts are solely the result of tying into an existing utility line and when grubbing or grading within 10 feet immediately adjacent to the surface water is avoided</u>		X		
<u>iii) Zone 1 impacts other than those listed above</u>			X	
<u>ii) Utility - Non-sewer Underground Lines – Vegetation maintenance activities that remove forest vegetation from existing utility right of ways (not including new line installation) outside of the existing utility line maintenance corridor:</u>				
<u>i) Zone 2 impacts</u>	X			
<u>ii) Zone 1 impacts: For lines that have not been maintained, the vegetation can be mowed, cut or otherwise maintained without disturbance to the soil structure for a maintenance corridor that is equal to or less than 30 feet wide</u>	X			
<u>iii) Zone 1 impacts other than those listed above</u>		X		

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
kk) <u>Utility – Non-Sewer Underground Lines – Perpendicular crossings of streams and other surface waters subject to Section 6.20.16, or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to Section 6.20.16, provided that vegetation is allowed to regenerate in disturbed areas outside of the permanent maintenance corridor:</u>				
i) <u>Construction corridor of less than or equal to 50 linear feet wide and a permanent maintenance corridor that is equal to or less than 30 feet wide</u>	X			
ii) <u>Construction corridor of greater than 50 linear feet wide and less than or equal to 150 linear feet wide and a permanent maintenance corridor that is equal to or less than 30 feet wide</u>		X		
iii) <u>Construction corridor of greater than 150 linear feet wide and a permanent maintenance corridor that is equal to or less than 30 feet wide</u>			X	
iv) <u>Permanent maintenance corridor that is greater than 30 linear feet wide (mitigation is required only for Zone 1 impacts)</u>			X	
ll) <u>Utility – Non-Sewer Underground Lines – Impacts other than perpendicular crossings provided that vegetation is allowed to regenerate in disturbed areas outside of the permanent maintenance corridor:</u>				
i) <u>Zone 2 impacts</u>	X			
ii) <u>Zone 1 impacts to less than 2,500 square feet when impacts are solely the result of tying into an existing utility line and when grubbing or grading within 10 feet immediately adjacent to the surface water is avoided</u>		X		
iii) <u>Zone 1 impacts other than those listed above</u>			X	
mm) <u>Utilities – Non-sewer aerial lines - Perpendicular crossings of streams and other surface waters subject to Section 6.20.16, or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to Section 6.20.16:</u>				
i) <u>Disturb equal to or less than 150 linear feet wide of riparian buffer provided that a minimum zone of 10 feet wide immediately adjacent to the waterbody is managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed, that no land grubbing or grading is conducted in Zone 1, and that poles or aerial infrastructure are not installed within 10 feet of a waterbody</u>	X			

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
<u>ii) Disturb greater than 150 linear feet wide of riparian buffer</u>		X		
<u>nn) Utilities – Non-sewer Aerial Lines - Impacts other than perpendicular crossings of streams and other surface waters subject to this Section 6.20.16, or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to this Section 6.20.16:</u>				
<u>i) Impacts in Zone 2 only</u>	X			
<u>ii) Impacts in Zone 1 provided that a minimum zone of 10 feet wide immediately adjacent to the waterbody is managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed, that no land grubbing or grading is conducted in Zone 1, and that poles or aerial infrastructure are not installed within 10 feet of a waterbody</u>		X		
<u>oo) Vegetation management:</u>				
<u>i) Emergency fire control measures provided that topography is restored</u>	X			
<u>ii) Periodic mowing and harvesting of plant products only in Zone 2</u>	X			
<u>iii) Placement of mulch ring around restoration plantings for a period of five years from the date of planting</u>	X			
<u>iv) Planting non-invasive vegetation to enhance the riparian buffer</u>	X			
<u>v) Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised</u>	X			
<u>vi) Removal of individual trees, branches or limbs which are in danger of causing damage to dwellings, existing utility lines, other structures or human life, or are imminently endangering stability of the streambank provided that the stumps are left or ground in place without causing additional land disturbance</u>	X			
<u>vii) Removal of individual trees that are dead, diseased or damaged</u>	X			
<u>viii) Removal of poison ivy, oak or sumac. Removal can include application of pesticides within the riparian buffer if the pesticides are certified by EPA for use in or near aquatic sites and are applied in accordance with the manufacturer's instructions. If removal is significant, then the riparian buffer shall be replanted with non-invasive species</u>	X			

Table 6.20.16.8 Permitted Uses within Riparian Buffers (continued)

<u>Riparian Buffer Use/Activity</u>	<u>Deemed Allowable</u>	<u>Allowable Upon Authorization</u>	<u>Allowable with Mitigation Upon Authorization</u>	<u>Prohibited</u>
<u>ix) Removal of understory nuisance vegetation as defined in: Smith, Cherri L. 2008. Invasive Plants of North Carolina. Dept. of Transportation. Raleigh, NC. Removal can include application of pesticides within the riparian buffer if the pesticides are certified by EPA for use in or near aquatic sites and are applied in accordance with the manufacturer's instructions. If removal is significant then the riparian buffer shall be replanted with non-invasive species</u>	X			
<u>x) Removal of woody vegetation in Zone 1 provided that Section 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is complied with</u>			X	
<u>pp) Vehicle access roads and boat ramps (excluding parking areas) leading to surface water, docks, fishing piers, and other water dependent activities:</u>				
<u>i) Single vehicular access road and boat ramp to the surface water but not crossing the surface water that are restricted to the minimum width practicable not to exceed 15 feet wide</u>		X		
<u>ii) 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 15 feet wide</u>			X	
<u>qq) Water dependent structures (except for boat ramps) as defined in 15A NCAC 02B .0202</u>		X		
<u>rr) Water supply reservoirs:</u>				
<u>i) New reservoirs provided that a riparian buffer that meets the requirements of sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is established adjacent to the reservoir</u>		X		
<u>ii) New reservoirs where a riparian buffer that meets the requirements of sections 6.20.16.7, Zones of the Riparian Buffer and 6.20.16.11, Stormwater Runoff Through the Riparian Buffer is NOT established adjacent to the reservoir</u>			X	
<u>ss) Water wells</u>	X			
<u>tt) Wildlife passage structures</u>		X		

~~6.20.16.8~~**6.20.16.9** **Basis for “No Practical Alternatives”**

~~In order for a permitted use to be authorized~~Where written authorization is required in Section 6.20.16.8, Permitted Uses Within Riparian Buffers, the applicant must demonstrate “no practical alternatives.” The determination of “no practical alternatives” will be made by the Planning Director or designee based upon the following:

- 6.20.16.9.a** 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.
- 6.20.16.9.b** 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.
- 6.20.16.9.c** Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat, and protect water quality.

~~6.20.16.96~~**6.20.16.10** **Written Authorization Required**

~~Where written authorization is required in Section 6.20.16.8, Permitted Uses Within Riparian Buffers, Proposed-proposed~~ impacts ~~from permitted uses~~ to the riparian buffer may not commence until written authorization is provided by the Planning Director or designee. Use authorization may include conditions specific to the proposed activity. Unauthorized impacts to riparian buffers are subject to enforcement penalties as outlined in *Section 8, Enforcement*.

~~6.20.16.106~~**6.20.16.11** **Diffuse Flow Requirement**Stormwater Runoff Through the Riparian Buffer

~~6.20.16.10.a~~ Diffuse flow or runoff shall be maintained in the riparian buffer by dispersing concentrated flow and re-establishing vegetation.

~~6.20.16.10.b~~ Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow before the runoff enters the riparian buffer.

~~6.20.16.10.c~~ Periodic corrective action to restore diffuse flow shall be taken if necessary to impede the formation of erosion gullies.

~~6.20.16.11.a~~ Stormwater runoff into the riparian buffer shall meet dispersed flow as defined in 15A NCAC 02H .1002 except as otherwise described in this section. Drainage conveyances include drainage ditches, roadside ditches, and stormwater conveyances.

The following stormwater conveyances through the riparian buffer are either deemed allowable or allowable upon authorization, as defined in Section 6.20.16.8, Permitted Uses within Riparian Buffers, provided that they do not erode through the riparian buffer and do not cause erosion to the receiving waterbody. Stormwater conveyances through the riparian buffer that are not listed below shall be allowable with exception as defined in Section 6.20.16.8.e, Allowable with Exception.

~~6.20.16.11.b~~ The following are deemed allowable as defined in Section 6.20.16.8.a, Deemed Allowable:

- i. New drainage conveyances from a Primary SCM, as defined in 15A NCAC 02H .1002, when the Primary SCM is designed to treat the drainage area to the conveyance and that comply with a stormwater management plan reviewed and approved under a state stormwater program or a state-approved local government stormwater program; and
- ii. New stormwater flow to existing drainage conveyances provided that the addition of new flow does not result in the need to alter the conveyance.

6.20.16.11.c The following are allowable upon authorization as defined in *Section 6.20.16.8.b, Allowable Upon Authorization:*

- i. New drainage conveyances from a Primary SCM as defined in 15A NCAC 02H .1002 when the Primary SCM is provided to treat the drainage area to the conveyance but are not required to be approved under a state stormwater program or a state-approved local government stormwater program;
- ii. New drainage conveyances when the drainage area to the conveyance is demonstrated via approved nutrient calculation methodologies to meet the nutrient loading goal of 2.2 pounds per acre per year of Nitrogen (N) and 0.33 pounds per acre per year of Phosphorus (P);
- iii. New drainage conveyances when the flow rate of the conveyance is less than 0.5 cubic feet per second during the peak flow from the 0.75 inch per hour storm;
- iv. New stormwater runoff that has been treated through a level spreader-filter strip that complies with 15A NCAC 02H .1059;
- v. Realignment of existing drainage conveyances applicable to publicly funded and maintained linear transportation facilities when retaining or improving the design dimensions provided that no additional travel lanes are added and the minimum required roadway typical section is used based on traffic and safety considerations;
- vi. Realignment of existing drainage conveyances retaining or improving the design dimensions provided that the size of the drainage area and the percent built-upon area within the drainage area remain the same;
- vii. New or altered drainage conveyances applicable to publicly funded and maintained linear transportation facilities provided that SCMs, or BMPs from the NCDOT Stormwater Best Management Practices Toolbox, are employed;
- viii. New drainage conveyances applicable to publicly funded and maintained linear transportation facilities that do not provide a stormwater management facility due to topography constraints provided other measures are employed to protect downstream water quality to the maximum extent practical; and
- ix. New drainage conveyances where the drainage area to the conveyance has no new built-upon area as defined in 15A NCAC 02H .1002 and the conveyance is necessary for bypass of existing drainage only.

~~6.20.16.11~~ **6.20.16.12 Mitigation**

Where mitigation is required pursuant to the permitted uses listed in *Section ~~6.20.16.6 6.20.16.8, Permitted Uses Within Riparian Buffers~~ and Table ~~6.20.16.8, Permitted Uses within Riparian Buffers~~*, mitigation shall follow the standards set out in the state's consolidated Riparian Buffer Mitigation Rule, 15A NCAC 02B .0295.

~~6.20.16.12~~ **6.20.16.13 Riparian Buffer and Minimum Lot Requirements**

The riparian buffer may be used in meeting the required minimum lot areas set forth in the Ordinance.

~~6.20.16.13~~ **Existing Vegetation and New Vegetation in Riparian buffers**

~~Existing vegetation shall not be disturbed within a riparian buffer without prior approval of the Planning Director or designee. Existing vegetation may be augmented within the buffer and invasive vegetation may be removed if the Planning Director or designee approves the plans in advance. Any work done in the riparian buffer must be designed and intended to increase the infiltration capability of the buffer and reduce the velocity of stormwater run-off.~~

~~In the situation where the required buffer experiences erosion problems due to topography or other existing conditions of the land, the Planning Director or designee shall require that the buffer be planted so that it will function as a sediment and pollutant trap. Such planting shall be completed prior to the issuance of a Certificate of Occupancy.~~

~~The use of pesticides, herbicides, or chemicals is not allowed in the riparian buffer except with the prior approval of the Planning Director or designee, and only allowed as described within the Neuse Buffer Rules.~~