

1 **15A NCAC 02B .0295 is proposed for amendment with changes as published in 29:16 NCR 1939-1950 as**
 2 **follows:**

3
 4 **15A NCAC 02B .0295 MITIGATION PROGRAM REQUIREMENTS FOR PROTECTION AND**
 5 **MAINTENANCE OF RIPARIAN BUFFERS**

6 (a) PURPOSE. The purpose of this Rule is to set forth the mitigation requirements that apply to applicants listed in
 7 ~~Subparagraphs (1) and (2) of this Paragraph (c) of this Rule~~ and to set forth requirements for buffer mitigation
 8 providers. ~~Buffer mitigation is required when one of the following applies:~~

9 ~~(1) The applicant has received an authorization certificate for impacts that cannot be avoided or~~
 10 ~~practicably minimized pursuant to Rules .0233, .0243, .0250, .0259, .0267 or .0607 of this~~
 11 ~~Subchapter; or~~

12 ~~(2) The applicant has received a variance pursuant to Rules .0233, .0243, .0250, .0259, .0267 or .0607~~
 13 ~~of this Subchapter and is required to perform mitigation as a condition of a variance approval.~~

14 (b) DEFINITIONS. For the purpose of this Rule, these terms shall be defined as follows:

15 (1) "Authority" means either the Division or a local government that has been delegated or designated
 16 pursuant to Rules .0233, .0243, .0250, .0259, .0267 or .0607 of this Subchapter to implement the
 17 riparian buffer program.

18 (2) "Compensatory Buffer Mitigation Bank" means a buffer mitigation site created by a mitigation
 19 provider and approved for mitigation credit by the Division through execution of a mitigation
 20 banking instrument.

21 ~~(2)~~(3) "Division" means the Division of Water Resources of the North Carolina Department of
 22 Environment and Natural Resources.

23 ~~(3)~~(4) "Enhancement Site" means a riparian zone site characterized by conditions between that of a
 24 restoration site and a preservation site such that the establishment of woody stems (i.e., tree or
 25 shrub species) will maximize nutrient removal and other buffer functions.

26 ~~(4)~~(5) "Hydrologic Area" means the Watershed Boundary Dataset (WBD), located at no cost at
 27 [http://data.nconemap.com/geoportals/catalog/search/resource/details.page?uuid={16A42F31-](http://data.nconemap.com/geoportals/catalog/search/resource/details.page?uuid={16A42F31-6DC7-4EC3-88A9-03E6B7D55653})
 28 6DC7-4EC3-88A9-03E6B7D55653} using the eight-digit Hydrologic Unit Code (HUC) prepared
 29 by the United States Geological Survey.

30 ~~(5)~~(6) "Locational Ratio" means the mitigation ratio applied to the mitigation requirements based on the
 31 location of the mitigation site relative to the impact site as set forth in Paragraph (f).

32 (7) "Mitigation banking instrument" means the legal document for the establishment, operation, and
 33 use of a mitigation bank.

34 ~~(6)~~(8) "Monitoring period" means the length of time specified in the approved mitigation plan during
 35 which monitoring of vegetation success and other anticipated benefits to the adjacent water as
 36 listed in the ~~authorization certificate~~ mitigation approval is done.

1 ~~(7)~~(9) "Non-wasting endowment" means a fund that generates enough interest to cover the cost of the
2 long term monitoring and maintenance.

3 ~~(8)~~(10) "Outer Coastal Plain" means the portion of the state shown as the Middle Atlantic Coastal Plain
4 (63) on Griffith, et al. (2002) "Ecoregions of North and South Carolina." Reston, VA, United
5 States Geological Survey available at no cost at
6 http://www.epa.gov/wed/pages/ecoregions/ncsc_eco.htm.

7 ~~(9)~~(11) "Preservation Site" means riparian zone sites that are characterized by a ~~natural forest consisting~~
8 ~~of the forest strata and diversity of species appropriate for the Omernik Level III ecoregion.~~
9 ~~ecoregion available at no cost at http://www.epa.gov/wed/pages/ecoregions/level_iii_iv.htm.~~ ~~forest~~
10 ~~of trees or trees and shrubs where no one species is greater than 50 percent of the vegetation and~~
11 ~~where invasive species are not present in quantities which will cause or are likely to cause harm to~~
12 ~~the health of the forest.~~

13 ~~(10)~~(12) "Restoration Site" means riparian zone sites that are characterized by an absence of trees and by a
14 lack of dense growth of smaller woody stems (i.e., shrubs or saplings) or sites that are
15 characterized by scattered individual trees such that the tree canopy is less than 25 percent of the
16 cover and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings).

17 ~~(11)~~(13) "Riparian buffer mitigation unit" means a unit representing a credit of riparian buffer mitigation
18 ~~that offsets one square foot of riparian buffer impact as set forth in Paragraph (m).~~

19 ~~(12)~~(14) "Riparian wetland" means a wetland that is found in one or more of the following landscape
20 positions:

- 21 (A) in a geomorphic floodplain;
- 22 (B) in a natural topographic crenulation;
- 23 (C) contiguous with an open water equal to or greater than 20 acres in size; or
- 24 (D) subject to tidal flow regimes excluding salt/brackish marsh wetlands.

25 ~~(15) "Stem" means a woody seedling, sapling, shrub or tree, no less than 10 cm in height.~~

26 ~~(13)~~(15)(16) "Urban" means an area that is designated as an urbanized area under the most recent
27 federal decennial census available at no cost at <http://www.census.gov/> or within the corporate
28 limits of a municipality.

29 ~~(14)~~(16)(17) "Zonal Ratio" means the mitigation ratio applied to impact amounts in the respective
30 zones of the riparian buffer as set forth in Paragraph (e) of this Rule.

31 (c) ~~MITIGATION REQUIREMENTS. APPLICATION REQUIREMENTS, MITIGATION SITE~~
32 ~~REQUIREMENTS AND MITIGATION OPTIONS. Buffer mitigation is required when one of the following~~
33 ~~applies:~~

34 ~~(1) The applicant has received an authorization certificate for impacts pursuant to Rules .0233, .0243,~~
35 ~~.0250, .0259, .0267 or .0607 of this Subchapter and is required to perform mitigation as a~~
36 ~~condition of the authorization certificate; or~~

1 (2) The applicant has received a variance pursuant to Rules .0233, .0243, .0250, .0259, .0267 or .0607
 2 of this Subchapter and is required to perform mitigation as a condition of a variance approval.

3 Any applicant ~~who seeks approval to impact riparian buffers covered under this Rule who is required by Paragraph~~
 4 ~~(a) shall submit to the Division Authority a written mitigation proposal that calculates the required area of mitigation~~
 5 ~~and describes the area and location of each type of proposed mitigation. The applicant shall not impact buffers until~~
 6 ~~the Division Authority approves the mitigation plan and issues written authorization approval. For all options~~
 7 ~~except payment of a fee under Paragraphs (j) or (k) of this Rule, the proposal shall include a commitment to provide:~~

8 ~~(1) a perpetual conservation easement or similar legal protection mechanism to ensure perpetual~~
 9 ~~stewardship that protects the mitigation site's nutrient removal and other water quality functions;~~

10 ~~(2) a commitment to provide a non-wasting endowment or other financial mechanism for perpetual~~
 11 ~~stewardship and protection; and~~

12 ~~(3) a commitment to provide a completion bond that is payable to the Division sufficient to ensure~~
 13 ~~that land or easement purchase, construction, monitoring, and maintenance are completed.~~

14 ~~For each mitigation site, the Division shall identify functional criteria to measure the anticipated benefits of the~~
 15 ~~mitigation to the adjacent water. The Division shall issue a mitigation determination that specifies the area, type,~~
 16 ~~and location of mitigation and the water quality benefits to be provided by the mitigation site. The mitigation~~
 17 ~~determination issued according to this Rule shall be included as an attachment to the authorization certification. The~~
 18 ~~applicant may propose any of the following types of mitigation and shall provide a written demonstration of~~
 19 ~~practicality that takes into account the relative cost and availability of potential options, as well as information~~
 20 ~~addressing all requirements associated with the option proposed:~~

21 ~~(1) Applicant provided riparian buffer restoration or enhancement pursuant to Paragraph (i) of this~~
 22 ~~Rule;~~

23 ~~(2) Payment of a compensatory mitigation fee to a mitigation bank if buffer credits are available~~
 24 ~~pursuant to Paragraph (j) of this Rule or payment of a compensatory mitigation fee to the Riparian~~
 25 ~~Buffer Restoration Fund pursuant to Paragraph (k) of this Rule. Payment shall conform to the~~
 26 ~~requirements of G.S. 143-214.20;~~

27 ~~(3) Donation of real property or of an interest in real property pursuant to Paragraph (l) of this Rule;~~
 28 ~~or~~

29 ~~(4) Alternative buffer mitigation options pursuant to Paragraph (m) of this Rule.~~

30 (d) AREA OF IMPACT. The ~~authority~~ Authority shall determine the area of impact in square feet to each ~~zone~~
 31 Zone as defined by the applicable riparian buffer Rules .0233, .0243, .0250, .0259, .0267, or .0607 of this
 32 Subchapter of the proposed riparian buffer ~~impact~~ by adding the following:

33 (1) The area of the footprint of the use impacting the riparian buffer;

34 (2) The area of the boundary of any clearing and grading activities within the riparian buffer
 35 necessary to accommodate the use; and

36 (3) The area of any ongoing maintenance corridors within the riparian buffer associated with the use.

1 The ~~authority~~ Authority shall deduct from this total the area of any wetlands that are subject to and compliant with
 2 riparian wetland mitigation requirements under 15A NCAC 02H .0506 and are located within the proposed riparian
 3 buffer impact area.

4 (e) AREA OF MITIGATION REQUIRED ON ZONAL MITIGATION RATIOS. The ~~authority~~ Authority shall
 5 determine the required area of mitigation for each ~~zone~~ Zone by applying each of the following ratios to the area of
 6 impact calculated under Paragraph (d) of this Rule:

Basin/Watershed	Zone 1 Ratio	Zone 2 Ratio
Neuse River Basin (15A NCAC 02B .0233)	3:1	1.5:1
Catawba River Basin (15A NCAC 02B .0243)	2:1	1.5:1
Randleman Lake Watershed (15A NCAC 02B .0250)	3:1	1.5:1
Tar-Pamlico River Basin (15A NCAC 02B .0259)	3:1	1.5:1
Jordan Lake Watershed (15A NCAC 02B .0267)	3:1	1.5:1
Goose Creek Watershed (15A NCAC 02B .0607)	3:1 ^A	

7 ^A The Goose Creek Watershed does not have a Zone 1 and Zone 2. The mitigation ratio in the Goose
 8 Creek Watershed is 3:1 for the entire buffer.
 9

10 (f) AREA OF MITIGATION REQUIRED ON LOCATIONAL MITIGATION RATIOS. The applicant or
 11 mitigation provider shall use the following locational ratios as applicable based on location of the proposed
 12 mitigation site relative to that of the proposed impact site. Locational ratios shall be as follows:

Location	Ratio
Within the 12-digit HUC ^A	0.75:1
Within the eight-digit HUC ^B	1:1
In the adjacent <u>Outside of the</u> eight-digit HUC ^{B,C}	2:1

13 ^A Except within the Randleman Lake Watershed. Within the Randleman Lake Watershed
 14 the ratio is 1:1.

15 ^B Except as provided in Paragraph (g) of this Rule.

16 ^C ~~To use mitigation in the adjacent eight digit HUC, the applicant shall describe why buffer~~
 17 ~~mitigation within the eight digit HUC is not practical for the project.~~
 18

19 (g) GEOGRAPHIC RESTRICTIONS ON LOCATION OF MITIGATION. Mitigation shall be performed in the
 20 same river basin where the impact is located with the following additional specifications:

- 21 (1) In the following cases, mitigation shall be performed in the same watershed in which the impact is
 22 located:
 - 23 (A) Falls Lake Watershed, as defined in Rule .0275 of this Section;
 - 24 (B) Goose Creek Watershed, as defined in Rule .0601 of this Subchapter;
 - 25 (C) Randleman Lake Water Supply Watershed, as defined in Rule .0248 of this Section;
 - 26 (D) Each subwatershed of the Jordan Lake watershed, as defined in Rule .0262 of this
 27 Section; and
 - 28 (E) Other watersheds as specified in riparian buffer protection rules adopted by the
 29 Commission.
- 30 (2) Buffer mitigation for impacts within watersheds with riparian buffer rules that also have federally
 31 listed threatened or endangered aquatic species may be done within other watersheds with the
 32 same federally listed threatened or endangered aquatic species as long as the impacts are in the

1 same river basin and same Omernik Level III ecoregion ~~available at no cost at~~
 2 ~~http://www.epa.gov/wed/pages/ecoregions/level_iii_iv.htm~~ as the mitigation site.

3 (h) MITIGATION OPTIONS FOR APPLICANTS. The applicant may propose any of the following types of
 4 ~~mitigation: and shall provide a written demonstration of practicality that takes into account the relative cost and~~
 5 ~~availability of potential options, as well as information addressing all requirements associated with the option~~
 6 ~~proposed:~~

7 (1) ~~Applicant provided riparian Riparian~~ buffer restoration or enhancement pursuant to Paragraph (n)
 8 of this Rule;

9 (2) Payment of a compensatory mitigation fee to a compensatory buffer mitigation bank ~~if buffer~~
 10 ~~credits are available~~ pursuant to Paragraph (i) of this Rule or payment of a compensatory
 11 mitigation fee to the Riparian Buffer Restoration Fund pursuant to Paragraph (j) of this Rule.
 12 Payment shall conform to the requirements of G.S. 143-214.20;

13 (3) Donation ~~of real property or of an interest in real property~~ pursuant to Paragraph (k) of this Rule;

14 (4) Alternative buffer mitigation ~~options~~ pursuant to Paragraph (o) of this Rule; or

15 (5) Other buffer mitigation ~~options whenas~~ approved by the Environmental Management Commission
 16 as a condition of a variance approval.

17 ~~Riparian buffer restoration or enhancement is required with an area at least equal to the footprint of the buffer~~
 18 ~~impact, and the remaining mitigation resulting from the application of the zonal mitigation ratios in Paragraph (e)~~
 19 ~~and locational mitigation ratios in Paragraph (f) may be met through other mitigation options.~~

20 ~~(h) RIPARIAN BUFFER MITIGATION UNITS.~~ Mitigation activities shall generate riparian buffer mitigation
 21 units as follows:

Mitigation Activity	Square Feet of Mitigation Buffer	Riparian Buffer Mitigation Units Generated
Restoration	1	1
Enhancement	2	1
Preservation on Non-Subject Urban Streams	3	1
Preservation on Subject Urban Streams	3	1
Preservation on Non-Subject Rural Streams	5	1
Preservation on Subject Rural Streams	10	1

22
 23 (i) PURCHASE OF BUFFER MITIGATION CREDITS FROM A PRIVATE OR PUBLIC COMPENSATORY
 24 BUFFER MITIGATION BANK. Applicants who choose to satisfy some or all of their mitigation by purchasing
 25 mitigation credits from a private or public compensatory buffer mitigation bank shall meet the following
 26 requirements:

27 (1) The compensatory buffer mitigation bank from which credits are purchased shall have available
 28 riparian buffer credits approved by the Division;

29 (2) The compensatory buffer mitigation bank from which credits are purchased shall be located as
 30 described in Paragraphs (e), (f), and (g) of this Rule; and

1 (3) After receiving a mitigation acceptance letter from the compensatory buffer mitigation bank, proof
 2 of payment for the credits shall be provided to the Authority prior to any activity that results in the
 3 removal or degradation of the protected riparian buffer.

4 (j) PAYMENT TO THE RIPARIAN BUFFER RESTORATION FUND. Applicants who choose to satisfy some or
 5 all of their mitigation requirement by paying a compensatory mitigation fee to the Riparian Buffer Restoration Fund
 6 shall meet the requirements of Rule .0269 of this Section. Payment made to the NC ~~Ecosystem Enhancement~~
 7 ~~Program~~Division of Mitigation Services (the ~~Program~~DMS) shall be contingent upon acceptance of the payment by
 8 the ~~Program~~DMS. The ~~Program~~-DMS shall consider their financial, temporal, and technical ability to satisfy the
 9 mitigation request to determine whether they shall accept or deny the request.

10 (k) DONATION OF PROPERTY. Applicants who choose to satisfy their mitigation requirement by donating real
 11 property or an interest in real property to fully or partially offset an approved payment into the Riparian Buffer
 12 Restoration Fund pursuant to Paragraph (j) of this Rule shall do so in accordance with 15A NCAC 02R .0403.

13 (l) MITIGATION SITE REQUIREMENTS FOR APPLICANTS AND MITIGATION PROVIDERS. For each
 14 mitigation site proposed by an applicant or mitigation provider under Paragraphs (n) or (o), the Authority shall
 15 identify functional criteria to measure the anticipated benefits of the mitigation to the adjacent water. The Authority
 16 shall issue a mitigation determination that specifies the area, type, and location of mitigation and the water quality
 17 benefits to be provided by the mitigation site. All mitigation proposals shall meet the following criteria:

18 (1) The location of the buffer mitigation site shall comply with the requirements of Paragraphs ~~(e)~~, (f),
 19 and (g) of this Rule. In the Catawba watershed, buffer mitigation may be done along the lake
 20 shoreline as well as along intermittent and perennial stream channels throughout the watershed.

21 (2) The mitigation proposal shall include a commitment to provide:

22 (A) a perpetual conservation easement or similar preservation mechanism to ensure perpetual
 23 stewardship that protects the mitigation site's nutrient removal and other water quality
 24 functions;

25 (B) a non-wasting endowment or other dedicated financial surety to provide for the perpetual
 26 land management and hydrological maintenance of lands ~~and maintenance of~~
 27 structures; and

28 (C) financial assurance in the form of a completion bond, credit insurance, letter of credit,
 29 escrow, or other vehicle acceptable to the Authority payable to, or for the benefit of, the
 30 Authority in an amount sufficient to ensure that the property is secured in fee title or by
 31 easement, and that planting or construction, monitoring and maintenance are completed
 32 as necessary to meet success criteria as specified in the approved mitigation plan. This
 33 financial assurance obligation shall not apply to the NC ~~Ecosystem Enhancement~~
 34 ~~Program~~Division of Mitigation Services.

35 (3) Diffuse flow of runoff shall be maintained in the riparian buffer. Any existing impervious cover
 36 or stormwater conveyances such as ditches, pipes, or drain tiles shall be eliminated and the flow
 37 converted to diffuse flow. If the applicant or mitigation provider determines that elimination of

1 existing stormwater conveyances is not feasible, then they shall include a justification and shall
 2 provide a delineation of the watershed draining to the stormwater outfall and the percentage of the
 3 total drainage by area treated by the riparian buffer with the mitigation plan specified in Paragraph
 4 (n) or Paragraph (o) for Authority approval. During mitigation plan review and approval the
 5 Division may reduce credit proportionally.

6 (4) Sewer easement within the buffer. If the proposed mitigation site contains a sewer easement in
 7 Zone 1, that portion of the sewer easement within Zone 1 is not suitable for buffer mitigation
 8 credit. If the proposed mitigation site contains a sewer easement in Zone 2, the portion of the
 9 sewer easement in Zone 2 may be suitable for buffer mitigation credit if:

10 (A) the applicant or mitigation provider restores or enhances the forested buffer in Zone 1
 11 adjacent to the sewer easement;

12 (B) the sewer easement is required to be maintained in a condition that meets the vegetative
 13 requirements of the collection system permit; and

14 (C) diffuse flow is provided across the entire buffer width.

15 (5) The ~~applicant or~~ mitigation provider shall provide a site specific credit/debit ledger to the
 16 Authority at regular intervals as specified in the mitigation plan approval or Mitigation Banking
 17 Instrument once credits are established and until they are exhausted.

18 (6) Projects that have been constructed and are within the required monitoring period on the effective
 19 date of this Rule are eligible for use as buffer mitigation sites. Projects that have completed
 20 monitoring and ~~were~~ released by the Division on or ~~before~~ within the past ten years of the
 21 effective date of this Rule ~~are may be~~ eligible for use as a buffer mitigation site for a period of 10
 22 years from the effective date of this Rule. All mitigation site proposals submitted under this
 23 Subparagraph shall meet the requirements set out in Paragraphs (l) and (m) of this rule and the
 24 requirements set out in the named Paragraph or Subparagraph addressing that applicable
 25 mitigation type or option, as well as the following:

26 (A) A map or maps of the proposed mitigation site;

27 (B) Documentation of pre-existing conditions showing that the mitigation site met the criteria
 28 to qualify as a restoration site or enhancement site as defined in Paragraph (b) of this
 29 Rule, or that the mitigation site met the criteria to qualify as an alternative mitigation site
 30 as specified in the Paragraph (o);

31 (C) Documentation of the activities that were conducted at the buffer mitigation site to meet
 32 success criteria identified in the applicable Paragraph or Subparagraph; and

33 (D) Documentation that the project met the success criteria identified in the applicable
 34 Paragraph or Subparagraph.

35 Buffer mitigation sites shall receive credit in accordance with the criteria set forth Paragraph (m)
 36 and Subparagraph (n)(1).

(7) Buffer mitigation credit, nutrient offset credit, wetland mitigation credit, and stream mitigation credit shall be accounted for in accordance with the following:

(A) Buffer mitigation used for buffer mitigation credit shall not be used for nutrient offset credits;

(B) Buffer mitigation credit shall not be generated within wetlands that provide wetland mitigation credit required by 15A NCAC 02H .0506; and

(C) Buffer mitigation credit may be generated on stream mitigation sites as long as the width of the restored or enhanced riparian buffer meets the requirements of Subparagraph (n)(1).

(m) RIPARIAN BUFFER MITIGATION UNITS. Mitigation activities shall generate riparian buffer mitigation units as follows:

<u>Mitigation Activity</u>	<u>Square Feet of Mitigation Buffer</u>	<u>Riparian Buffer Mitigation Units Generated</u>
<u>Restoration Site</u>	<u>1</u>	<u>1</u>
<u>Enhancement Site</u>	<u>2</u>	<u>1</u>
<u>Preservation Site on Non-Subject Urban Streams</u>	<u>3</u>	<u>1</u>
<u>Preservation Site on Subject Urban Streams</u>	<u>3</u>	<u>1</u>
<u>Preservation Site on Non-Subject Rural Streams</u>	<u>5</u>	<u>1</u>
<u>Preservation Site on Subject Rural Streams</u>	<u>10</u>	<u>1</u>

~~(n) RIPARIAN BUFFER RESTORATION SITE OR ENHANCEMENT SITE. ENHANCEMENT.~~ Division Authority staff shall make an on-site determination as to whether a potential mitigation site qualifies as a restoration site or enhancement site as defined in Paragraph (b) of this Rule. Riparian buffer restoration sites or enhancement sites shall meet the following requirements:

(1) Buffer restoration sites or enhancement sites may be proposed as follows:

<u>Urban Areas</u>		<u>Non-Urban Areas</u>	
<u>Buffer width (ft)</u>	<u>Proposed Percentage of Full Credit</u>	<u>Buffer width (ft)</u>	<u>Proposed Percentage of Full Credit</u>
<u>Less than 20</u>	<u>0 %</u>	<u>Less than 20</u>	<u>0 %</u>
<u>20-29</u>	<u>75 %</u>	<u>20-29</u>	<u>0 %</u>
<u>30-100</u>	<u>100 %</u>	<u>30-100</u>	<u>100 %</u>
<u>101-200 [^]</u>	<u>50% [^] 25%</u>	<u>101-200 [^]</u>	<u>50% [^]</u>

~~[^]The area of the buffer mitigation site beyond 100 linear feet from the top of bank shall comprise no more than 10 percent of the total area of buffer mitigation.~~

~~(2) The location of the restoration or enhancement shall comply with the requirements of Paragraphs (e), (f), and (g) of this Rule. In the Catawba watershed, buffer mitigation may be done along the lake shoreline as well as along intermittent and perennial stream channels throughout the watershed.~~

~~(3) Diffuse flow of runoff shall be maintained in the riparian buffer. Any existing impervious cover or stormwater conveyances such as ditches, pipes, or drain tiles shall be eliminated and the flow converted to diffuse flow. If elimination of existing stormwater conveyances is not feasible, then~~

1 ~~the applicant or mitigation provider shall provide a delineation of the watershed draining to the~~
 2 ~~stormwater outfall and the percentage of the total drainage treated by the riparian buffer for~~
 3 ~~Division approval; the Division may reduce credit proportionally.~~

4 (4)(2) The applicant or mitigation provider shall submit to the Authority a restoration or enhancement
 5 mitigation plan for written approval by the Division. The ~~restoration or enhancement~~ plan shall
 6 demonstrate compliance with the requirements of Subparagraphs (1) through (3) of this Paragraph
 7 and Paragraphs (l) and (m) and shall also contain the following: ~~following in addition to the~~
 8 ~~elements required in Paragraph (c) of this Rule:~~

9 (A) A map of the proposed restoration or enhancement site;

10 (B) A vegetation plan that shall detail the activities proposed to ensure a final performance
 11 standard of 260 stems per acre at the completion of monitoring. The final performance
 12 standard shall include a minimum of four native hardwood tree species or four native
 13 hardwood tree and native shrub species, where no one species is greater than 50 percent
 14 of ~~established~~ stems, ~~established~~ planted at a density sufficient to provide 260 stems per
 15 acre at the completion of monitoring. Native hardwood and native shrub volunteer
 16 species may be included to meet the final performance standards. standard of 260 stems
 17 per acre. The ~~Division~~ Authority may approve alternative vegetation plans upon
 18 consideration of factors, including site wetness and plant availability to meet the
 19 requirements of this Part;

20 (C) A grading plan (if applicable). The site shall be graded in a manner to ensure diffuse
 21 flow through the entire riparian buffer;

22 (D) A schedule for implementation, including a fertilization and herbicide plan if applicable;
 23 and

24 (E) A monitoring plan, including monitoring of vegetative success to document whether the
 25 site is expected to meet the final performance standards as defined in Subparagraph
 26 (n)(2)(B) and other anticipated benefits to the adjacent water as listed in the authorization
 27 certification. The plan shall include monitoring the vegetative status of the restoration or
 28 enhancement site for five years, including the health and average stem densities of native
 29 hardwood tree or tree and shrub species that are to be counted toward the final
 30 performance standard.

31 (5)(3) Within one year after the ~~Division has approved the restoration or enhancement~~ Authority
 32 approval of the mitigation plan, the applicant or mitigation provider shall present documentation
 33 to the ~~Division~~ Authority that the riparian buffer has been restored or enhanced unless the ~~Division~~
 34 Authority agrees in writing prior to that date to a longer time period. ~~period due to the necessity~~
 35 ~~for a longer construction period.~~

1 ~~(6) The mitigation area shall be placed under a perpetual conservation easement or similar legal~~
 2 ~~protection mechanism to provide for protection of the property's nutrient removal and other water~~
 3 ~~quality functions.~~

4 ~~(7)(4)~~ The applicant or mitigation provider shall submit written annual reports for a period of five years
 5 after completion of the activities identified in Subparagraph (n)(2)(B) at the restoration site or
 6 enhancement ~~site has been conducted showing~~ showing:

7 ~~(A) that the survival of the trees or tree and shrub species planted compliance with the~~
 8 ~~monitoring plan approved pursuant to Subparagraph (n)(2)(E) of this Rule;~~

9 ~~(B) whether the vegetation of the site is expected to meet are meeting success criteria;~~ and

10 ~~(C)(B)~~ that diffuse flow through the riparian buffer has been maintained.

11 ~~The~~ If the Authority determines that the native hardwood tree or tree and shrub species at the site are not
 12 expected to meet the final performance standards listed in Subparagraph (n)(2)(B), then the Authority may
 13 require that the applicant or mitigation provider ~~shall~~ replace trees or trees and shrubs and restore diffuse
 14 flow if as needed during that five-year period. If the Authority determines that diffuse flow through the
 15 buffer is not being maintained, then the Authority may require that the applicant or mitigation provider
 16 restore diffuse flow. If the Authority determines that the objectives-final performance standards listed in
 17 Subparagraph (n)(2)(B) identified in this Paragraph have not been achieved at the end of the five-year
 18 monitoring period the Authority may require additional Additional years of monitoring. ~~monitoring may be~~
 19 ~~required if the objectives under Paragraph (i) have not been achieved at the end of the five-year monitoring~~
 20 ~~period.~~

21 ~~(8) The mitigation provider shall provide a site specific credit/debit ledger to the Division at regular~~
 22 ~~intervals once credits are established and until they are exhausted.~~

23 ~~(9) The mitigation provider shall provide a completion bond that is payable to the Division sufficient~~
 24 ~~to ensure that land purchase, construction, monitoring, and maintenance are completed. A non-~~
 25 ~~wasting endowment or other financial mechanism for perpetual maintenance and protection shall~~
 26 ~~be provided.~~

27 ~~(j) PURCHASE OF BUFFER MITIGATION CREDITS FROM A PRIVATE OR PUBLIC MITIGATION BANK.~~

28 Applicants who choose to satisfy some or all of their mitigation by purchasing mitigation credits from a private or
 29 public mitigation bank shall meet the following requirements:

30 ~~(1) The mitigation bank from which credits are purchased is listed on the Division's webpage~~
 31 ~~(<http://portal.nednr.org/web/wq/swp/ws/401>) and has available riparian buffer credits;~~

32 ~~(2) The mitigation bank from which credits are purchased shall be located as described in Paragraphs~~
 33 ~~(e), (f), and (g) of this Rule; and~~

34 ~~(3) After receiving a mitigation acceptance letter from the mitigation provider, proof of payment for~~
 35 ~~the credits shall be provided to the Division prior to any activity that results in the removal or~~
 36 ~~degradation of the protected riparian buffer.~~

~~(k) PAYMENT TO THE RIPARIAN BUFFER RESTORATION FUND. Applicants who choose to satisfy some or all of their mitigation determination by paying a compensatory mitigation fee to the Riparian Buffer Restoration Fund shall meet the requirements of Rule .0269 of this Section. Payment made to the NC Ecosystem Enhancement Program (the Program) shall be contingent upon acceptance of the payment by the Program. The Program shall consider their financial, temporal, and technical ability to satisfy the mitigation request to determine whether they shall accept or deny the request.~~

~~(l) DONATION OF PROPERTY. Applicants who choose to satisfy their mitigation determination by donating real property or an interest in real property to fully or partially offset an approved payment into the Riparian Buffer Restoration Fund pursuant to Paragraph (k) of this Rule shall meet the following requirements:~~

~~(1) The value of the property interest shall be determined by an appraisal performed in accordance with Part (l)(4)(D) of this Rule. The donation shall satisfy the mitigation determination if the appraised value of the donated property interest is equal to or greater than the required fee. If the appraised value of the donated property interest is less than the required fee calculated pursuant to Rule .0269 of this Section, the applicant shall pay the remaining balance due.~~

~~(2) The donation of real property interests shall be granted in perpetuity.~~

~~(3) Donation of real property interests to satisfy the full or partial payments under Paragraph (k) shall be accepted only if such property meets the following requirements:~~

~~(A) The property shall be suitable for restoration or enhancement to successfully produce viable riparian buffer compensatory mitigation credits in accordance with Paragraph (i) of this Rule or the property shall be suitable for preservation to successfully produce viable riparian buffer compensatory mitigation credits in accordance with Part (m)(2)(C) of this Rule;~~

~~(B) The property shall be located in an area where the Program may reasonably utilize the credits, based on historical or projected use, to offset compensatory mitigation requirements;~~

~~(C) The estimated cost of restoring or enhancing and maintaining the property shall not exceed the projected mitigation credit value of the property minus land acquisition costs, except where the applicant supplies additional funds acceptable to the Program for restoration or enhancement and maintenance of the buffer;~~

~~(D) The property shall not contain any building, structure, object, site, or district that is listed in the National Register of Historic Places established pursuant to Public Law 89-665, 16 U.S.C. 470 as amended;~~

~~(E) The property shall not contain any hazardous substance or solid waste such that water quality may be adversely impacted, unless the hazardous substance or solid waste can be properly remediated before the interest is transferred;~~

~~(F) The property shall not contain structures or materials that present health or safety concerns to the general public. If wells, septic, water, or sewer connections exist, they~~

- 1 shall be filled, remediated or closed at owner's expense in accordance with state and local
 2 health and safety regulations before the interest is transferred. Sewer connections in Zone
 3 2 may be allowed for projects in accordance with Part (m)(2)(E) of this Rule;
- 4 (G) ~~— The property and adjacent properties shall not have prior, current, or known future land~~
 5 ~~use that may jeopardize the functions of the compensatory mitigation;~~
- 6 (H) ~~— The property shall not have any encumbrances or conditions that are inconsistent with the~~
 7 ~~requirements of this Rule or purposes of Rules .0233, .0243, .0250, .0259, .0267 or .0607~~
 8 ~~of this Subchapter;~~
- 9 (I) ~~— Fee simple title to the property or a perpetual conservation easement on the property shall~~
 10 ~~be donated to the State of North Carolina, a local government, or a qualified holder under~~
 11 ~~N.C. General Statute 121-34 et seq. and 26 USC 170(h) of the Internal Revenue Code as~~
 12 ~~approved by the Department and the donee; and~~
- 13 (J) ~~— The donation shall be accompanied by a non-wasting endowment or other financial~~
 14 ~~mechanism for perpetual maintenance and protection sufficient to ensure perpetual long-~~
 15 ~~term monitoring and maintenance. However, when a local government has donated a~~
 16 ~~perpetual conservation easement and entered into a binding intergovernmental agreement~~
 17 ~~with the Program to manage and protect the property consistent with the terms of the~~
 18 ~~perpetual conservation easement, that local government shall not be required to provide a~~
 19 ~~non-wasting endowment.~~
- 20 (4) ~~— At the expense of the applicant or donor, the following information shall be submitted to the~~
 21 ~~Program with any proposal for donations or dedications of interest in real property:~~
- 22 (A) ~~— Documentation that the property meets the requirements of Subparagraph (1)(3) of this~~
 23 ~~Rule;~~
- 24 (B) ~~— A US Geological Survey 1:24,000 (7.5 minute) scale topographic map, county tax map,~~
 25 ~~USDA Natural Resource Conservation Service County Soil Survey Map, and county road~~
 26 ~~map showing the location of the property to be donated, along with information on~~
 27 ~~existing site conditions, vegetation types, presence of existing structures, and easements;~~
- 28 (C) ~~— A current property survey performed in accordance with the procedures of the North~~
 29 ~~Carolina Department of Administration, State Property Office as identified by the State~~
 30 ~~Board of Registration for Professional Engineers and Land Surveyors as set forth in 21~~
 31 ~~NCAC 56-1600.~~
- 32 (D) ~~— A current appraisal of the value of the property performed in accordance with the~~
 33 ~~procedures of the North Carolina Department of Administration, State Property Office as~~
 34 ~~identified by the Appraisal Board as set forth in 21 NCAC 57A-0501; and~~
- 35 (E) ~~— A complete attorney's report on title with a title commitment for policy in the name of the~~
 36 ~~State of North Carolina in the dollar amount of the appraised value.~~

1 ~~(m)(o)~~ ALTERNATIVE BUFFER MITIGATION OPTIONS. ~~Some or all of a buffer mitigation requirement may~~
 2 ~~be met through any of the alternative mitigation options described in this Paragraph.~~ Any proposal for alternative
 3 mitigation shall meet the requirements of Paragraphs ~~(e)~~, ~~(e)~~, ~~(f)(l)~~, and ~~(g)(m)~~ of this Rule, Rule and the
 4 requirements set out in the named Subparagraph addressing that option; ~~option~~, and the following requirements:

5 (1) Any proposal for alternative mitigation shall be provided in writing to the Division and shall meet
 6 the following content and procedural requirements for approval by the Division:

7 (A) Projects that have been constructed and are within the required monitoring period on the
 8 effective date of this Rule are eligible for use as alternative buffer mitigation. Projects
 9 that have completed monitoring and released by the Division on or before the effective
 10 date of this Rule are eligible for use as alternative buffer mitigation for a period of 10
 11 years from the effective date of this Rule;

12 (B) The mitigation area shall be placed under a perpetual conservation easement or similar
 13 legal protection mechanism to provide for protection of the property's nutrient removal
 14 and other water quality functions; and

15 (C) A completion bond payable to the Division sufficient to ensure that land purchase,
 16 construction, monitoring, and maintenance are completed.

17 (D) A non-wasting endowment or other financial mechanism for perpetual maintenance and
 18 protection shall be provided.

19 ~~(2) ALTERNATIVE BUFFER MITIGATION – NON STRUCTURAL, VEGETATIVE OPTIONS~~

20 ~~(A)(1)~~ Coastal Headwater Stream Mitigation. Wooded buffers planted along Outer Coastal Plain
 21 headwater stream mitigation sites may also be approved as riparian buffer mitigation credit as long
 22 as if the site meets all applicable requirements of Paragraph ~~(i)(n)~~ of this Rule. In addition, all
 23 success criteria ~~including woody species, stem density, diffuse flow, and stream success criteria~~
 24 specified in the approval of the stream mitigation site by the Division ~~in any required written~~
 25 ~~approval of the site~~ shall be met. The area of the buffer shall be measured perpendicular to the
 26 length of the valley being restored. The area within the proposed buffer mitigation site shall not
 27 also be used as wetland mitigation. The applicant or mitigation provider shall monitor the site for
 28 at least five years from the date of planting ~~by providing and provide~~ annual reports for written
 29 Division approval.

30 ~~(B)(2)~~ Buffer Restoration and Enhancement on Non-Subject Streams. Restoration or enhancement of
 31 buffers may be conducted on intermittent or perennial streams that are not subject to the applicable
 32 riparian buffer ~~rules~~ Rules .0233, .0243, .0250, .0259, .0267, .0607 of this Subchapter. These
 33 streams shall be confirmed as intermittent or perennial streams by Division staff certified per G.S.
 34 143-214.25A using the Division publication, Methodology for Identification of Intermittent and
 35 Perennial Streams and Their Origins (v.4.11, 2010) available at no cost at
 36 <http://portal.ncdenr.org/web/wq/swp/ws/401/waterresources/streamdeterminations>. The proposal
 37 shall meet all applicable requirements of Paragraph ~~(i)(n)~~ of this Rule.

1 ~~(C)~~(3) Preservation of Buffer on Non-subject streams. Preservation of buffers on intermittent or
 2 perennial streams that are not subject to the applicable riparian buffer rules Rules .0233, .0243,
 3 .0250, .0259, .0267, .0607 of this Subchapter may be proposed in order to permanently protect the
 4 buffer from cutting, clearing, filling, grading, and similar activities that would affect the
 5 functioning of the buffer. These streams shall be confirmed as intermittent or perennial streams by
 6 Division staff certified per G.S. 143-214.25A using the Division publication, Methodology for
 7 Identification of Intermittent and Perennial Streams and Their Origins (v.4.11, 2010). The
 8 preservation site shall meet the requirements of Subparagraph (n)(1) and the requirements set forth
 9 in 15A NCAC 02R .0403(c)(7), (8), and (11). ~~Subparagraphs (i)(1), (i)(3), (i)(6) and Parts~~
 10 ~~(4)(3)(D), (E), (F), (H) and (J) of this Rule. Preservation shall be proposed only when restoration~~
 11 ~~or enhancement with an area at least equal to the footprint of the buffer impact has been proposed.~~
 12 The area of preservation credit within a buffer mitigation site shall comprise of no more than 25
 13 percent of the total area of buffer mitigation.

14 ~~(D)~~(4) Preservation of Buffers on Subject Streams. Buffer preservation may be proposed on streams that
 15 are subject to the applicable riparian buffer Rules .0233, .0243, .0250, .0259, .0267, .0607 of this
 16 Subchapter in order to permanently protect the buffer from cutting, clearing, filling, grading, and
 17 similar activities that would affect the functioning of the buffer beyond the protection afforded by
 18 the existing buffer rules on sites that meet the definition of a preservation ~~site. site along streams,~~
 19 ~~estuaries, or ponds that are subject to buffer rules.~~ The preservation site shall meet the
 20 requirements of Subparagraph (n)(1) and the requirements set forth in 15A NCAC 02R
 21 .0403(c)(7), (8), and (11). ~~Subparagraphs (i)(1), (i)(3), (i)(6) and Parts (1)(3)(D), (E), (F), (H) and~~
 22 ~~(J) of this Rule. Preservation shall be proposed only when restoration or enhancement of an area~~
 23 ~~at least equal to the footprint of the buffer impact has been proposed.~~ The area of preservation
 24 credit within a buffer mitigation site shall comprise of no more than 25 percent of the total area of
 25 buffer mitigation.

26 ~~(E)~~ Sewer easement within the buffer. If the proposed mitigation site contains a sewer easement in
 27 Zone 1, that portion of the sewer easement within Zone 1 is not suitable for buffer mitigation. If
 28 the proposed mitigation site contains a sewer easement in Zone 2, the portion of the sewer
 29 easement in Zone 2 may be suitable for buffer mitigation if:

- 30 ~~(i)~~ the applicant or mitigation provider restores or enhances the forested buffer in
 31 Zone 1 adjacent to the sewer easement;
- 32 ~~(ii)~~ the sewer easement is at least 30 feet wide;
- 33 ~~(iii)~~ the sewer easement is required to be maintained in a condition that meets the
 34 vegetative requirements of the collection system permit; and
- 35 ~~(iv)~~ diffuse flow is provided across the entire buffer width.

~~The proposal shall meet all applicable requirements of Paragraph (i) of this Rule for restoration or enhancement. The proposal shall meet all applicable requirements of Part (m)(2)(C) of this Rule for preservation.~~

~~(F)~~(5) Enhancement of grazing areas adjacent to streams. Buffer credit at a 2:1 ratio shall be available for an applicant or mitigation provider who proposes permanent exclusion of grazing livestock that otherwise degrade the stream and riparian zone through trampling, grazing, or waste deposition by fencing the livestock out of the stream and its adjacent buffer. The applicant or mitigation provider shall provide an enhancement plan as set forth in Paragraph ~~(i)~~(n). The applicant or mitigation provider shall demonstrate that grazing was the predominant land use since the effective date of the applicable buffer rule.

~~(G)~~(6) Mitigation on ephemeral channels. For purposes of riparian buffer mitigation as described in this Part, an "ephemeral channel" is defined as a natural channel exhibiting discernible banks within a topographic crenulation (V-shaped contour lines) indicative of natural drainage on the 1:24,000 scale (7.5 minute) quadrangle topographic map prepared by the U.S. Geologic Survey, or as seen on digital elevation models with contours developed from the most recent available LiDAR ~~data~~ data available at no cost at <http://www.ncfloodmaps.com/lidar.com>. Ephemeral channels only flow for a short period of time after precipitation in the immediate area and do not have periods of base flow sustained by groundwater discharge. The applicant or mitigation provider shall provide a delineation of the watershed draining to the ephemeral channel. The entire area proposed for mitigation shall be within the contributing drainage area to the ephemeral channel. The ephemeral channel shall be directly connected to an intermittent or perennial stream and contiguous with the rest of the mitigation site protected under a perpetual conservation easement. The area of the mitigation site on ephemeral channels shall comprise no more than 25 percent of the total area of buffer mitigation. The proposal shall meet all applicable requirements of Paragraph ~~(i)~~(n) of this Rule for restoration or enhancement. The proposal shall meet all applicable requirements of Part ~~(m)(2)(C)~~ (o)(3) or (o)(4) of this Rule for preservation.

~~(H)~~(7) Restoration and Enhancement on Ditches. For purposes of riparian buffer mitigation as described in this Part, a "ditch" is defined as a man-made channel other than a modified natural stream that was constructed for drainage purposes. To be used for mitigation, a ditch shall meet all of the following criteria:

~~(i)~~(A) be directly connected with and draining towards an intermittent or perennial stream;

~~(ii)~~(B) be contiguous with the rest of the mitigation site protected under a perpetual conservation easement;

~~(iii)~~(C) stormwater runoff from overland flow shall drain towards the ditch;

~~(iv)~~(D) be between one and three feet in depth; and

~~(v)~~(E) the entire length of the ditch shall have been in place prior to the effective date of the applicable buffer rule.

1 The width of the restored or enhanced area shall not be less than 30 feet and shall not exceed 50
 2 feet for crediting purposes. The applicant or mitigation provider shall provide a delineation of the
 3 watershed draining to the ditch. The watershed draining to the ditch shall be at least four times
 4 larger than the restored or enhanced area along the ditch. The perpetual conservation easement
 5 shall include the ditch and the confluence of the ditch with the intermittent or perennial stream,
 6 and provide language that prohibits future maintenance of the ditch. The proposal shall meet all
 7 applicable requirements of Paragraph ~~(i)~~(n) of this Rule for restoration or enhancement.

8 ~~(3)~~(8) ~~ALTERNATIVE BUFFER STORMWATER TREATMENT OPTIONS~~ Stormwater Treatment
 9 Options. All stormwater treatment options shall meet the following requirements:

10 (A) ~~For all structural options: Riparian buffer restoration or enhancement is required with an~~
 11 ~~area at least equal to the footprint of the buffer impact, and the remaining mitigation~~
 12 ~~resulting from the multipliers may be met through structural options;~~

13 ~~(B)~~(A) Structural measures already required by other local, state or federal rule or permit cannot
 14 be used as alternative buffer ~~mitigation~~, mitigation credit, except to the extent such
 15 measure(s) exceed the requirements of such rule or permit. Stormwater Best Management
 16 Practices (BMPs), including bioretention facilities, constructed wetlands, infiltration
 17 devices and sand filter are all potentially approvable (BMPs) by the Division for
 18 alternative buffer ~~mitigation~~, mitigation credit. Other BMPs may be approved only if they
 19 meet the nutrient removal levels outlined in Part ~~(3)(C)~~(8)(B) of this Subparagraph.
 20 Existing or planned BMPs for a local, state, or federal rule or permit may be retrofitted or
 21 expanded to improve their nutrient removal if this level of treatment would not be
 22 required by other local, state, or federal rules. In this case, the predicted increase in
 23 nutrient removal may be counted toward alternative buffer ~~mitigation~~, mitigation credit;

24 ~~(C)~~(B) Minimum treatment levels: Any structural BMP shall provide at least 30 percent total
 25 nitrogen and 35 percent total phosphorus removal as demonstrated by a scientific and
 26 engineering literature review as approved by the Division. The mitigation proposal shall
 27 demonstrate that the proposed alternative removes an equal or greater annual mass load
 28 of nutrients to surface waters as the buffer impact authorized in the authorization
 29 certificate or variance, following the calculation of impact and mitigation areas pursuant
 30 to Paragraphs (d), (e), and (f) of this Rule. To estimate the rate of nutrient removal of the
 31 impacted buffer, the applicant or mitigation provider shall use the NC Division of Water
 32 Quality – Methodology and Calculation for determining nutrient reductions associated
 33 with Riparian Buffer Establishment available at no cost at
 34 [http://portal.ncdenr.org/c/document_library/get_file?uuid=55c3758f-5e27-46cf-8237-](http://portal.ncdenr.org/c/document_library/get_file?uuid=55c3758f-5e27-46cf-8237-47f890d9329a&groupId=38364)
 35 [47f890d9329a&groupId=38364](http://portal.ncdenr.org/c/document_library/get_file?uuid=55c3758f-5e27-46cf-8237-47f890d9329a&groupId=38364), ~~a method previously approved by the Division~~. The
 36 applicant or mitigation provider may propose an alternative method of estimating the rate
 37 of nutrient removal for consideration and review by the Division;

- 1 ~~(D)~~(C) All proposed structural BMPs shall follow the Division's 2009 Stormwater Best
2 Management Practice Design Manual available at no cost at
3 <http://portal.ncdenr.org/web/lr/bmp-manual>. If a specific proposed structural BMP is not
4 addressed in this Manual, the applicant or mitigation provider shall follow Chapter 20 in
5 this Manual for approval;
- 6 ~~(E)~~(D) All structural options are required to have Division approved operation and maintenance
7 plans;
- 8 ~~(F)~~(E) All structural options are required to have continuous and perpetual maintenance and
9 shall follow the Division's 2009 Stormwater Best Management Practice Design Manual;
- 10 ~~(G)~~(F) Upon completion of construction, the designer for the type of BMP installed shall certify
11 that the system was inspected during construction and that the BMP was constructed in
12 ~~substantial~~ conformity with plans and specifications approved by the Division;
- 13 ~~(H)~~(G) Removal and replacement of structural options: If a structural option is proposed to be
14 removed and cannot be replaced on-site, then a structural or non-structural measure of
15 equal or better nutrient removal capacity in a location as specified by Paragraph (f) and
16 (g) of this Rule shall be constructed as a replacement;
- 17 ~~(I)~~(H) Renovation or repair of structural options: If a structural option must be renovated or
18 repaired, it shall be renovated to provide equal or better nutrient removal capacity than as
19 originally designed; and
- 20 ~~(J)~~(I) Structural options as well as their operation and maintenance are the responsibility of the
21 landowner or easement holder unless the Division gives written approval for another
22 responsible party to operate and maintain them. Structural options shall be located in
23 recorded drainage easements for the purposes of operation and maintenance and shall
24 have recorded access easements to the nearest public right-of-way. These easements
25 shall be granted in favor of the party responsible for operating and maintaining the
26 structure, with a note that operation and maintenance is the responsibility of the
27 landowner, easement holder or other responsible ~~party. party; and~~
- 28 ~~(K) — Bonding and endowment. A completion bond payable to the Division sufficient to~~
29 ~~ensure that land purchase, construction, monitoring, and maintenance are completed and~~
30 ~~a non-wasting endowment or other financial mechanism for perpetual maintenance and~~
31 ~~protection shall be provided.~~
- 32 ~~(4)~~(9) CASE-BY-CASE APPROVAL FOR OTHER ALTERNATIVE BUFFER MITIGATION
33 OPTIONS. Other alternative riparian buffer mitigation options **that have not been specified within**
34 this Rule may be considered by submitted to the Division for review and recommendation to the
35 Environmental Management Commission on a case-by-case **basis. basis as long as the options**
36 otherwise meet the requirements of this Rule.—Any proposal submitted under this paragraph shall
37 provide documentation or calculations to demonstrate that the proposed alternative mitigation

1 option removes an equal or greater annual mass load of nutrients to surface waters as a riparian
 2 buffer. ~~Prior~~ Upon completion of the Division's review, and prior to recommendation to the
 3 Environmental Management Commission, the Division shall issue a ~~after~~ 30-calendar day public
 4 notice through the Division's ~~Water Quality Certification Mailing List in accordance with 15A~~
 5 ~~NCAC 02H .0503~~ website and the DWR wetlands Listserve as long as the options otherwise meet
 6 the requirements of this Rule. Division staff shall present their recommendations, including
 7 comments received during the public notice period, to the Environmental Management
 8 Commission for a final decision. ~~decision with respect to any proposal for other alternative buffer~~
 9 ~~mitigation options not specified described in this Rule.~~ If approved by the Environmental
 10 Management Commission, the alternative buffer mitigation option may be proposed by other
 11 applicants and mitigation providers.

12 ~~(n) ACCOUNTING FOR BUFFER CREDIT, NUTRIENT OFFSET CREDIT AND STREAM MITIGATION~~
 13 ~~CREDIT. Buffer mitigation credit, nutrient offset credit, wetland mitigation credit, and stream mitigation credit shall~~
 14 ~~be accounted for in accordance with the following:~~

- 15 (1) ~~Buffer mitigation used for buffer mitigation credit shall not be used for nutrient offset credits;~~
 16 (2) ~~Buffer mitigation or nutrient offset credit shall not be generated within wetlands that provide~~
 17 ~~wetland mitigation credit required by 15A NCAC 02H .0506; and~~
 18 (3) ~~Either buffer mitigation or nutrient offset credit may be generated on stream mitigation sites as~~
 19 ~~long as the width of the restored or enhanced riparian buffer meets the requirements of~~
 20 ~~Subparagraph (i)(1).~~

21
 22 *History Note: Authority 143-214.1; 143-214.5; 143-214.7; 143-214.20; 143-215.3(a)(1); 143-215.6A; 143-*
 23 *215.6B; 143-215.6C; 143-215.8A; 143-215.8B; 143-282(c); 143B-282(d); S.L. 1998-221; S.L.*
 24 *1999-329, s. 7.1; S.L. 2001-418, s. 4.(a); S.L. 2003-340, s. 5; S.L. 2005-190; S.L. 2006-259; S.L.*
 25 *2009-337; S.L. 2009-486; S.L. 2014-95;*
 26 *Temporary Adoption Eff. October 24, 2014.*
 27 *Amended Eff.*