



North Carolina Department of Environment and Natural Resources

Division of Water Quality
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Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

August 14, 2009 (with edits made August 18, 2009)

TO: 401 Water Quality Certification Mailing List

FROM: John Dorney, Program and Policy Development Unit
Cyndi Karoly, 401 Oversight and Express Permits Unit
Brian Wrenn, Transportation Permitting Unit
John Hennessy, Non-Point Source Assistance and Compliance Unit

RE: Update on permitting programs for Waters of the State administered by the Division of Water Quality

The purpose of this memo is to inform you of several items in relation to surface water programs administered by the Division of Water Quality (DWQ). For details regarding specific topics, please follow the appropriate web links or contact the staff members referenced within each heading. Note that where deadlines are posted for submission of written comments, comments sent by regular mail must be *received by* DWQ staff contacts by the posted date, not *mailed by* the commenter by that date. Therefore, last-minute submittals should be relayed by email rather than regular mail.

I. Description of Proposed Changes for NCDWQ Intermittent and Perennial Stream Identification Manual Version 4.0

The purpose of this memo is to inform you of several proposed revisions to the NCDWQ Stream Identification Manual. These proposed changes reflect the past experience in using the Manual across the state as well as questions raised in training sessions over the past several years. Staff believe that the overall score (19 points for an intermittent stream and 30 points for a perennial stream) will not change as a result of the proposed revisions but we intend to collect field data across the state for the next several months to be certain.

Proposed manual changes are described below. The Intermittent and Perennial Stream Identification Manual Version 4.0 can be found on our website at:

http://h2o.enr.state.nc.us/ncwetlands/documents/StreamIdentificationManualDRAFTAugust_2009.pdf

(note there is not a period at the end of this web site address). If you need a hard copy (black and white) mailed to you, please contact Periann Russell as noted below. Comments related to the proposed manual revisions should be sent to

NC Division of Water Quality, Program and Policy Development Unit
Parkview Building
2321 Crabtree Blvd. Suite 250
Raleigh, NC 27604-2260
Attn: Periann Russell
919-715-6835

Or emailed to Periann.Russell@ncdenr.gov, please identify Stream ID v. 4.0 in the subject line.

Comments must be received by the DWQ office in writing via regular mail or email by Wednesday, November 11, 2009 (90 calendar days from the date of this memorandum).

Description of Proposed Changes to the NCDWQ Stream Identification Manual

MANUAL TEXT

Descriptions of absent, weak, moderate and strong were previously explained only in the geomorphology and part of the hydrology sections. These descriptions are now also in the biology section of the Manual.

Additional explanations were made throughout the document for the purpose of clarification.

Literature citations were added throughout document.

The Hydric soils indicator and description was changed based on numerous comments and suggestions from the soil science community. The changes are intended to more accurately reflect the intent of the indicator; the language of the indicator is now "Evidence of a seasonal high water table."

In order to maintain the simplicity necessary in completing a rapid assessment of stream determination, the use of chroma rather than redox better explains the presence or absence of a seasonal high water table and varying saturated conditions. However, redoximorphic features are also important in identification of seasonal to permanent saturated conditions and are more readily recognizable to those not as well versed in the soil sciences. Therefore the use of redoximorphic features/hydric soils in the scoring of the indicator was replaced with a two-tiered decision using chroma as the main descriptor and the presence of redoximorphic features as a supplementary descriptor. Please see the Manual text for additional information.

DWQ encourages comments and suggestions regarding the changes to the soils indicator in order to further clarify and explain this indicator.

FORM

- Removed "levees" as a category from the form since levees are rarely (if ever) present on small streams.
- Separated soil texture and streambed sorting into separate factors and score each from 0 – 3 points.
- Change language for groundwater flow/discharge to "groundwater flow or discharge."
- Removed "water in channel in dry or growing season" from indicator leaving language as "water in channel and > 48 hours since rain."
- Added mollusks to bivalve indicator.
- Changed scoring for macrobenthos from 0 - 1.5 to 0 - 3.
- Changed scoring for algae/periphyton/aquatic mosses from 0 - 3 to 0 - 1.5
- Hydric Soils Indicator:
 - Changed hydric soil indicator language to "Evidence of seasonal high water table"
 - Changed scoring for hydric soil/redox from yes or no, to 0 - absent, 1 - weak, 2 - moderate, 3 - strong.

II. Intermittent Stream Mitigation Policy

As was presented to the Water Quality Committee of the Environmental Management Commission on November 12, 2008, intermittent streams support aquatic life, and thus they fall within the Division of Water Quality's (DWQ) mission to protect the propagation of aquatic life. Reflecting this improved understanding, DWQ will require mitigation for impacts with a cumulative total of greater than 150 linear feet of intermittent and/or perennial streams. This policy shall be applied to all streams including those not subject to jurisdiction under Section 404 (such as isolated streams). This threshold will apply to the project-wide total for all projects except linear public transportation projects (such as NC Department of Transportation (NCDOT) roads). For linear transportation projects, the policy will be applied on a per-stream basis for each project. The applied mitigation ratio will be 1:1, the same stream mitigation rate historically applied by DWQ. Mitigation may include a combination of restoration, enhancement or

preservation as described in the interagency Stream Mitigation Guidelines (April 2003 or subsequent versions) and approved by DWQ.

This policy will take effect for all new applications **received by the DWQ Central Office via regular mail on or after Friday, October 16, 2009** (60 calendar days from the date of this public memorandum).

Applications will not be accepted by email for the purposes of beating this deadline, as all applications are required to be sent via regular mail in accordance with 15A NCAC 2H .0502(a). All projects received by the DWQ Central Office, 401 Oversight and Express Permits Unit prior to the effective date of the policy will not be subject to this new policy. As of Friday, October 16, 2009, all new applications for projects or modifications to existing 401 Certifications/non-404 Permits will be subject to the Intermittent Stream Mitigation policy. This policy was also discussed in a memorandum dated December 4, 2008, and remains posted on the DWQ web site at the following address

http://h2o.enr.state.nc.us/ncwetlands/rd_pub_not.html .

NCDOT projects reviewed through the Clean Water Act Section 404/ National Environmental Policy Act Merger 01 Process (Merger 01) or Safe Accountable Flexible Efficient Transportation Equity Act; A Legacy for Users (SAFETEA-LU, published by the US Army Corps of Engineers and the Federal Highway Administration, 2003) or its immediate successor, and that have reached agreement with Department of Environment and Natural Resources on avoidance and minimization (Concurrence Point 4A) prior to the effective date of this policy are not subject to the new intermittent stream mitigation policy. Furthermore, if a project is not reviewed by the Merger 01 process or SAFETEA-LU or its immediate successor but has an issued Finding of No Significant Impact and has the written approval of the NC Division of Water Quality prior to the effective date of this policy, then it is not subject to the new Intermittent Stream Mitigation Policy.

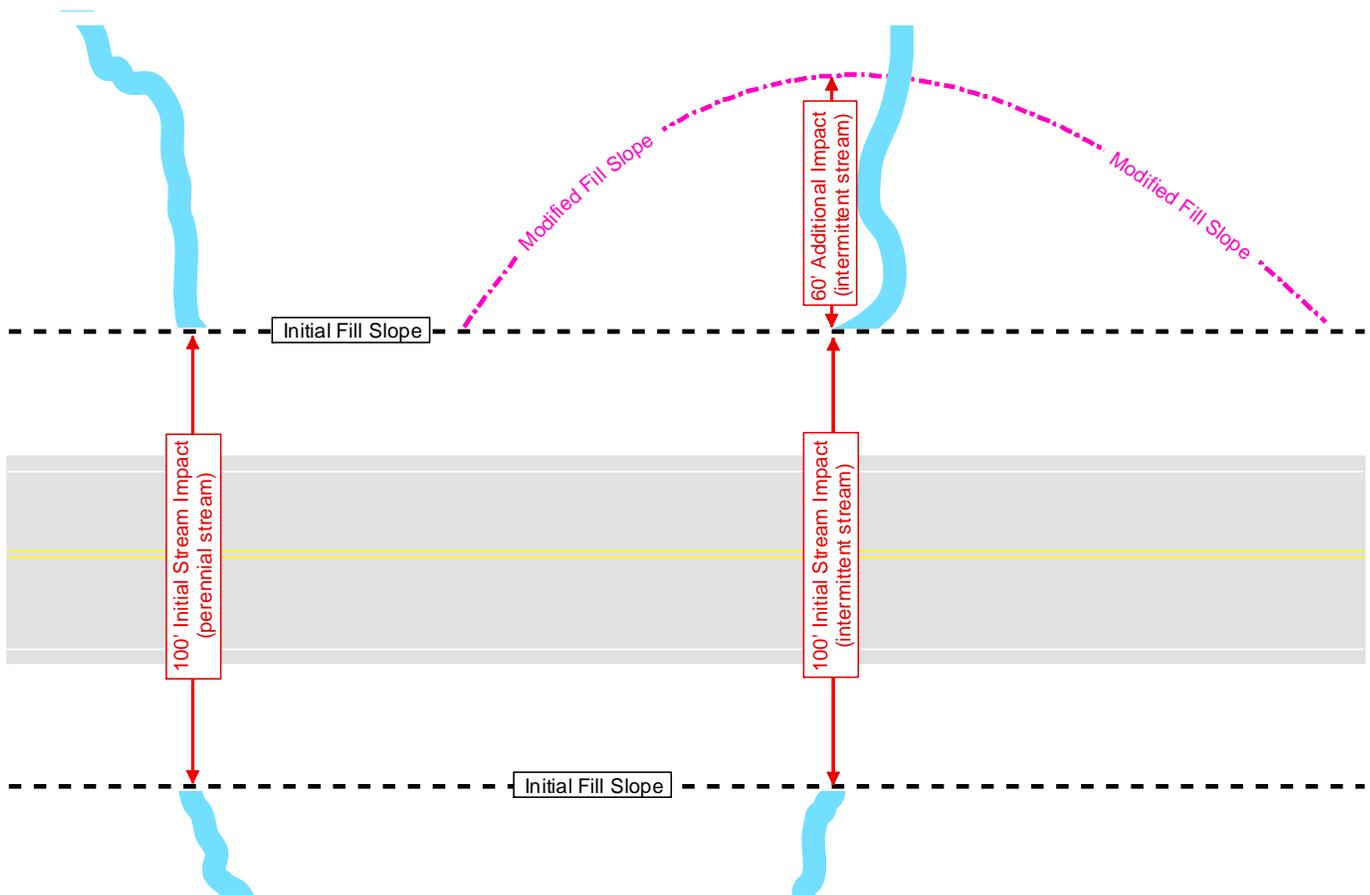
The following examples are provided to address questions related to the new policy as it applies to phased projects, modifications, or other projects with prolonged regulatory processes:

- For phased non-DOT projects, newly proposed intermittent and perennial stream impacts shall be added to previous perennial stream impacts, but not previous intermittent stream impacts, for mitigation purposes. In other words, prior intermittent stream impacts will be grandfathered as long as the 401 Certification/404 Permit has not expired. We will not add intermittent stream impacts covered under an existing (unexpired) permit to the required mitigation total for a new phase. For example, a 401 Certification was issued for Phase A of a 2008 project that included impacts to 100 linear feet of intermittent streams and 100 linear feet of perennial streams. Since the total perennial stream impacts fell below 150 feet in 2008, the mitigation requirement was not triggered at all. The application for Phase B of the project will be submitted on December 1, 2009, and includes 100 linear feet of perennial streams and 100 linear feet of intermittent streams. The 200 linear feet of additional intermittent and perennial stream impacts will be added to the 100 linear feet of perennial stream impacts associated with Phase A for a required total of 300 linear feet of stream mitigation at a 1:1 ratio. The intermittent stream impacts associated with Phase A did not require mitigation under the original permit, and will not be added to the mitigation total for the permit associated with Phase B.
- In some cases, an applicant may have received a 401 Certification, but the project was never actually built before the 401 Certification/404 Permit expired. If the applicant never pursued renewal of an issued Certification/Permit before it expired, then it is simply no longer in effect. For example, a 401 Certification was issued for Turkey Creek subdivision in 2002, but it was never built before the 404/401 expired in 2007, and a permit renewal was never requested. The 2002 Certification included 100 feet of intermittent and 100 feet of perennial stream impacts (200 feet of streams total). No mitigation was required in 2002 since the impacts to perennial streams did not exceed 150 feet. Now, Turkey Creek no longer has a 401 Certification. If the developer wishes to proceed with constructing Turkey Creek in 2009, a new application for 401 Certification will need to be submitted. Since the total intermittent plus perennial stream impacts exceed 150 feet, the new application will need to include a mitigation plan for 200 feet of stream impacts.
- For NCDOT linear projects, mitigation is determined on a per stream basis. If the original 401 issued prior to the effective date of the intermittent stream mitigation policy has less than 150 feet

of intermittent stream impacts on any one stream, but a modification is requested after the effective date of the new policy, and the modification would result in intermittent stream impacts greater than 150 feet on any one stream, then mitigation would be required for the additional intermittent stream impacts requested in the modification.

Ex. In Figure 1 below, the original 401 (issued prior to the new policy) authorized impacts at two streams, a perennial stream (100' of impact) and an intermittent stream (100' of impact). A modification is requested (after the effective date of the new policy) that would increase the impacts at the intermittent stream by 60' (160' of total impact). Therefore, the modified 401 would require mitigation for 60' of intermittent stream impacts at the intermittent stream.

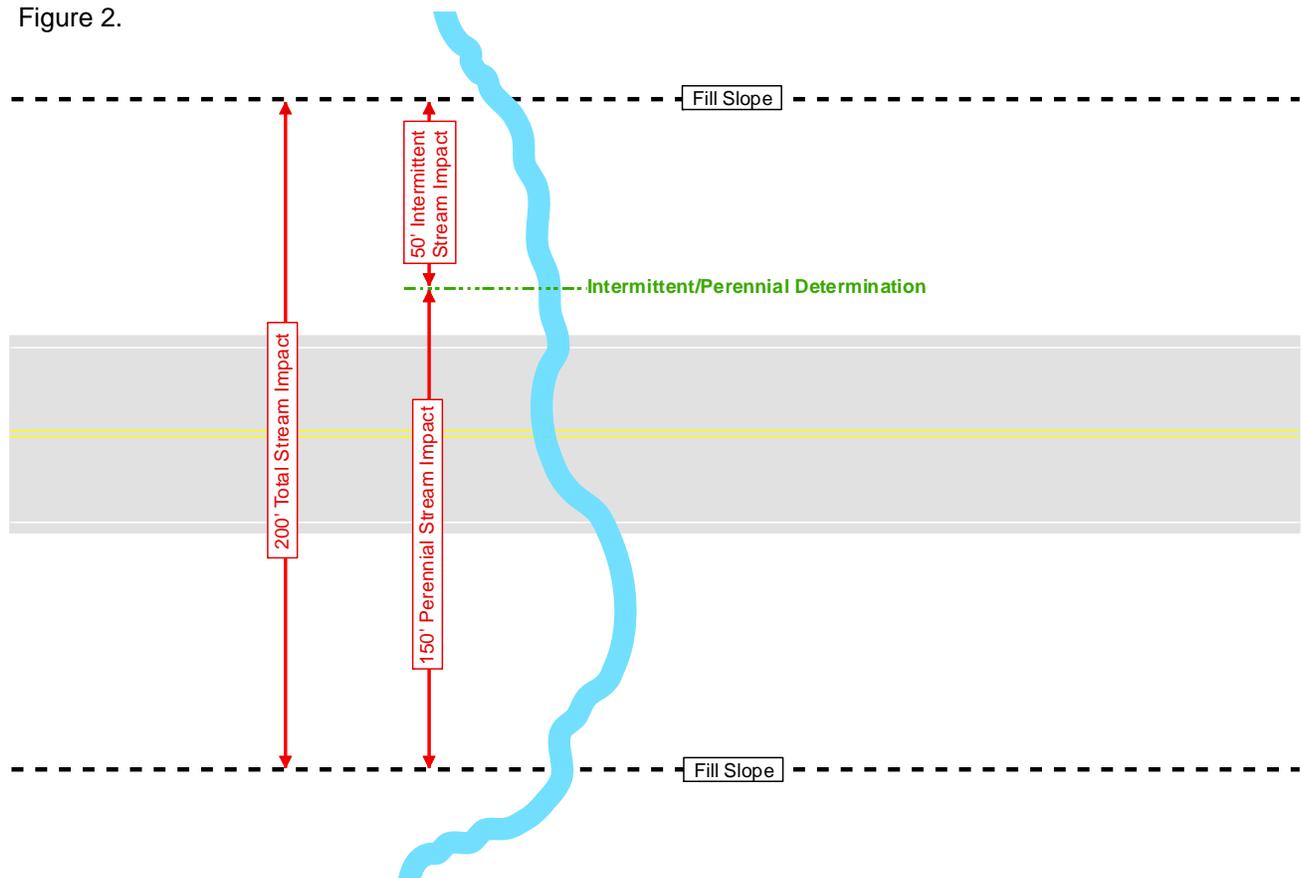
Figure 1.



- In some instances, the intermittent/perennial point of the stream is located within the area to be impacted. In these cases, if the total impacts are greater than 150' then mitigation would be required for the length of stream impacted.

Ex. In Figure 2 below, the intermittent/perennial point is located within the fill slopes of the roadway. The impacts are a total of 200' of stream with 50' of intermittent stream and 150' of perennial stream. The applicant would be required to submit a mitigation plan for the total impacts of 200' of stream.

Figure 2.



- Intermittent stream mitigation credits should be generated through enhancement of existing intermittent channels (e.g. bank stabilization, planting, livestock exclusion) rather than creation of a new stream channel. Ratios for enhancement will be as established in the Corps/DWQ Stream Mitigation Guidelines (April 2003) available at (http://www.saw.usace.army.mil/WETLANDS/Mitigation/stream_mitigation.html). NCDWQ will also accept perennial stream mitigation for intermittent stream impacts, and vice versa.
- Occasionally project modifications or expansions require a new 401 Certification, but the applicant previously provided mitigation to meet 404 Permit requirements at a higher ratio than the 1:1 ratio required by DWQ. In this situation, DWQ will consider applying the past stream mitigation that exceeded DWQ's 1:1 requirement toward the intermittent stream mitigation requirement. In order to do so, the application must clearly delineate all previous and newly proposed stream impacts, and include a clear accounting of compensatory stream mitigation associated with those impacts.

Other scenarios not described specifically here may arise over time. DWQ staff will be happy to discuss those situations on a case-by-case basis. If you have questions, please contact DWQ staff in the Central Office at 919-733-1786, or in the appropriate Regional Office as shown on our web site at <http://h2o.enr.state.nc.us/ncwetlands> .

III. Proposed Modification of Written Application Thresholds in General Certification 3699 (applied to Nationwide Permit 12).

The Division is proposing a modification to the language regarding written thresholds for General Certification 3699, which can be viewed at http://h2o.enr.state.nc.us/ncwetlands/documents/WQC3699_001.pdf . The purpose of this modification is to clarify that GC 3699 may be utilized for permanent impacts proposed from utility line construction and/or maintenance provided written authorization is sought and received from the Division. The proposed language for the revision is shown below. Comments related to this proposed revision must be received by Sue Homewood in the DWQ Winston-Salem Regional Office via regular mail at 585 Waughtown Street, Winston-Salem, NC 27107 or email at Sue.Homewood@ncdenr.gov by Friday, October 16, 2009 (60 calendar days from the date of this public memorandum). The proposed revision is as follows:

Permanent impacts to any wetlands and/or waters, including streams, under this General Certification requires application to, and written approval from the Division of Water Quality (the "Division")

*Temporary impacts covered by this General Certification do not require written approval from the Division as long as they comply with the Conditions listed below. **Written approval is required if the maintenance corridor is greater than 15 feet wide. Gas pipelines may have a maintenance corridor wider than fifteen feet if mitigation is provided for these additional wetland fills.***

IV. Important Updates to EEP's In-lieu Fee and Nutrient Offset Programs

On July 27, 2009 the N.C. Ecosystem Enhancement Program received notification that Gov. Perdue signed Session Law 2009-337 (Senate Bill 755, An Act to Promote the Use of Compensatory Mitigation Banks). In anticipation of this development, EEP collaborated with the N.C. Division of Water Quality to develop procedures to implement SL 2009-337 with a focus on assisting customers, including private-sector applicants and local governments. SL 2009-337 affects all non-government applicants seeking mitigation for wetlands or streams, riparian buffers or nutrient-offset credits. Please visit the EEP Web site at the link below for the announcement of the updated policy and procedures. EEP will continue to coordinate with DWQ and stakeholders as necessary.

http://www.nceep.net/pages/ILF_Program_intro.html

(NOTE: The new law also stipulated that the Department of Environment and Natural Resources will study whether the preference for compensatory wetland and stream mitigation banks, riparian-buffer mitigation banks and nutrient-offset banks established under law in the past two years "create a likelihood that EEP will be unable to recoup investments made in riparian buffer mitigation and nutrient offset projects." The report is due to the state Environmental Review Commission no later than Feb. 1, 2010.)

If you have questions concerning this matter, please contact EEP In-lieu Fee Coordinator Kelly Williams at (919)716-1921 or kelly.williams@ncdenr.gov.

V. Buffer Rule Variance Application Form Revisions

A variance application form for Major and Minor variances from the Neuse and Tar-Pamlico Buffer Rules has been updated. There are separate Minor and Major variance applications that apply only to projects in the Washington Regional Office's jurisdiction that have been updated as well.

There is also a new variance application for the Goose Creek Buffer Rules.

All of these updated variance application forms can be downloaded from the following website under the heading "Buffer Variance Forms and Documents":

<http://h2o.enr.state.nc.us/ncwetlands/RiparianBufferRules.htm>

VI. Proposed Neuse Riparian Buffer and Nutrient Offset Umbrella Bank

The purpose of this memo is to inform you of Wildlands, Inc.'s (Wildlands) proposal to develop and operate a riparian buffer and nutrient offset umbrella mitigation bank. An umbrella bank has multiple sites which are individually approved by DWQ and are then added to the bank under the same Mitigation Banking Instrument.

The purpose of the proposed bank will be to provide riparian buffer mitigation credit as required under the Neuse Riparian Buffer rules. In addition, the proposed bank will also provide nutrient offset credits to partially offset the nutrient loading requirements specified in the Neuse Nutrient Management Strategy rules.

Bank Parcel Development Packages will be submitted for each proposed bank site, and will be reviewed and approved. Project sites will generally involve planting of trees in minimum 50-foot wide buffers on streams and ditches on the property. Some sites may involve construction of stormwater Best Management Practices (BMPs) to provide nutrient offset functions. All Bank Parcel Development Packages will be posted on the DWQ website for review and comment prior to approval.

Credits can be sold to offset buffer impacts or nutrient loading for sites located within the same U.S. Geological Survey 8-digit hydrologic unit code (HUC) as the individual bank parcels.

Wildlands has also submitted a Bank Parcel Development Package for the Little River Farm Parcel which is located off Bridge Drive, near the intersection of Capps Bridge Road and U.S. Highway 70 in Wayne County. This bank parcel will be used to generate nitrogen offset credit through restoration of approximately 23 acres of buffers along two unnamed tributaries to Little River, as well as along field ditches on the property. Riparian buffer and nutrient offset credits can be used to satisfy mitigation requirements for projects located within Neuse HUC 03020201.

The Wildlands' Neuse Umbrella Banking Instrument and the Little River Farms Bank Parcel Development Plan can both be found at the following link: <http://h2o.enr.state.nc.us/ncwetlands/mitigation.html> . Questions regarding this proposed bank can be directed to Eric Kulz at 919-715-9050 or in writing to Eric.Kulz@ncdenr.gov or 2321 Crabtree Blvd., Suite 250, Raleigh, NC 27606 by close of business (5:00 p.m.) on Wednesday, September 16, 2009. Comments received will be taken into consideration during preparation and approval of the final Mitigation Banking Instrument.

VII. Proposed Cape Fear Riparian Buffer and Nutrient Offset Umbrella Bank

The purpose of this memo is to inform you of Mid-Atlantic Mitigation, LLC's (MAM) proposal to develop and operate a riparian buffer and nutrient offset umbrella mitigation bank. An umbrella bank has multiple sites which are individually approved by DWQ and are then added to the bank under the same Mitigation Banking Instrument.

The purpose of the proposed bank will be to provide riparian buffer mitigation credit as required under the proposed rules for the Jordan Lake Water Supply Nutrient Strategy. In addition, the proposed bank will also provide nutrient offset credits to partially offset the nutrient loading requirements specified in the proposed rules.

Bank Parcel Development Packages will be submitted for each proposed bank site, and will be reviewed and approved. Project sites will generally involve planting of trees in a minimum 50-foot wide buffers on streams and ditches on the property. Some sites may involve construction of stormwater Best Management Practices (BMPs) to provide nutrient offset functions. All Bank Parcel Development Packages will be posted on the DWQ website for review and comment prior to approval.

Credits can be sold to offset buffer impacts or nutrient loading for sites located within the same U.S. Geological Survey 8-digit hydrologic unit code (HUC) as the individual bank parcels.

MAM has also submitted a Bank Parcel Development Package for the Carl Lloyd Bank Parcel, which is located in the southeast quadrant of the intersection of Old Greensboro Road and Holly Creek Lane in Orange County. This bank parcel will be used to generate nitrogen offset credit through restoration of approximately 11 acres of buffers along two unnamed tributaries to Neville Creek. These credits can be used to satisfy nutrient offset requirements for projects located within Cape Fear HUC 03030002.

The Cape Fear Umbrella Banking Instrument and the Carl Lloyd Bank Parcel Development Package can both be found at the following link: <http://h2o.enr.state.nc.us/ncwetlands/mitigation.html>. Questions regarding this proposed bank can be directed to Eric Kulz at 919-715-9050 or in writing to Eric.Kulz@ncdenr.gov or 2321 Crabtree Blvd., Suite 250, Raleigh, NC 27606 by close of business (5:00 p.m.) on Wednesday, September 16, 2009. Comments received will be taken into consideration during preparation and approval of the final Mitigation Banking instrument.

VIII. Suggested Steps for Agricultural Pond Evaluation & Approval to Build

In 2009 a stakeholder group was convened to develop regulatory guidance for pond construction exclusively for agricultural purpose and need (food, fiber and livestock only). This work group produced four documents listed below, and available on the DWQ website under the heading "Agricultural Ponds" at http://h2o.enr.state.nc.us/ncwetlands/specific_policies.html. These guidance documents are to be used by farmers in working with local US Department of Agriculture – Natural Resource Conservation Service agents and state/federal regulators pursuant to farm pond construction. Questions related to these guidance documents with regards to the 401 Certification process can be directed to Cyndi Karoly at (919) 733-9721 or Cyndi.Karoly@ncdenr.gov :

- Suggested Steps for Agricultural Pond Evaluation & Approval to Build.doc
- Department of the Army (DA) Permitting Options for Farm Pond Construction.doc
- US Army Corps of Engineers Farm Pond Irrigation Exemption Request.doc
- Preliminary Site Assessment for New Ponds.doc (includes FACT SHEET: Planning & Permitting Requirements Associated with Pond Construction)

IX. Proposed Modification of Stormwater Provisions for 401 General Certifications

In response to public comments, the DWQ has made a number of modifications to the Stormwater Management Provisions that were put to Public Notice on March 12, 2009. The purpose of these changes was to increase the clarity and improve the organization of the documents that support the 401 Stormwater program.

The modifications to the language in the stormwater conditions in the General Certifications are as follows:

- In Part (A), the wording was changed to allow all publicly funded linear transportation projects to follow the NCDOT BMP Manual regardless of whether the applicant is the NCDOT or a local government.
- In Part (B)(i)(a)(4), the wording of the requirement for higher density areas within low density developments was modified in an effort to improve clarity.
- In Part (B)(i)(b), the requirements for high density developments were moved from the *SMP Requirements for Applicants Other Than the NCDOT* into the GC to improve organization and accountability.
- Part(B)(ii) was added to include the requirement for 30-foot vegetated buffers into the 401 Stormwater Program. This provision is now included to increase the consistency between the 401 and other state stormwater programs, such as Phase II and the Coastal Counties Stormwater Rule (2007 SB 1967)..

- In Part (B)(iii), the need for nonerosive flow to wetlands for all projects was clarified.
- In Part (B)(iv), the requirements for projects below written authorization thresholds was moved from the *SMP Requirements for Applicants Other Than the NCDOT* into the GC to improve organization and accountability.

The document *SMP Requirements for Applicants Other Than the NCDOT* was renamed *Protocol for Stormwater Management Plan Approval and Implementation*. The language was edited to make it more clear and concise. Technical requirements were moved from this document to the General Certification to improve organization and accountability. The DWQ hopes that the protocol document will serve to assist applicants with the process of SMP approval and implementation rather than set forth engineering requirements. The 401 Unit is also requesting that applicants with low density projects provide a DWQ Low Density Supplement Form with their application (as is required for low density applications to other state stormwater programs).

Comments related to these proposed revisions must be received by Annette Lucas in the DWQ Central Office via regular mail at 2321 Crabtree Blvd, Suite 250, Raleigh, NC, 27604 or email at Annette.Lucas@ncdenr.gov by Friday, October 16, 2009 (60 calendar days from the date of this public memorandum).

The proposed Stormwater Management Condition of GC 3704 and 3705 is as follows:

12. Stormwater Management Program Requirements

- A. Linear public transportation projects will be required to treat stormwater runoff to the Maximum Extent Practicable in accordance with the practices described in the NCDOT BMP Manual.
- B. All other projects shall comply with the requirements set forth below. In addition, the applicants shall follow the procedures explained in *Protocol for Stormwater Management Plan (SMP) Approval and Implementation* that is in place on the date of the submittal of the SMP.
 - i. **Project Density:** Projects with SMPs that require 401 Oversight/ Express Unit approval shall be classified as either Low or High Density according to the criteria described below.
 - a. **Low Density:** A development shall be considered Low Density if ALL of the following criteria are shown to have been met.
 1. The overall site plan, excluding ponds, lakes, rivers (as specified in North Carolina's Schedule of Classifications) and saltwater wetlands (SWL), must contain less than 24% impervious surface area considering both current and future development.
 2. All stormwater from the entire site must be transported primarily via vegetated conveyances designed in accordance with the most recent version of the NC DWQ Stormwater BMP Manual.
 3. The project must not include a stormwater collection system (such as piped conveyances) as defined in NCAC 2B .0202.
 4. If a portion of project has a density greater than 24%, the project shall be considered low density as long as the higher density portion of the project complies with Items 1-3 above and the higher density area is located in upland areas and away from surface waters and drainageways to the maximum extent practicable.

- b. **High Density:** Projects that do not meet the Low Density criteria described above are considered to be High Density, requiring the installation of appropriate BMPs as described below.

1. All stormwater runoff from the site must be treated by BMPs that are designed, at a *minimum*, to remove 85 percent of Total Suspended Solids (TSS).
2. In addition to controlling 85 percent of TSS, projects requiring located in watersheds that drain directly to waters containing these supplemental classifications shall meet the following requirements:

<i>Water Quality Supplemental Classification</i>	Stormwater BMP Requirement
§303(d)	Project-specific conditions may be added by the Division to target the cause of the water quality impairment.
NSW	A minimum of 30 percent total phosphorus and 30 percent total nitrogen removal.
Trout (Tr)	A minimum of 30 percent total phosphorus and 30 percent total nitrogen removal; BMPs should also be designed to minimize thermal pollution.

3. All BMPs must be designed in accordance with the most recent version of the *NC Division of Water Quality Stormwater Best Management Practices Manual*. Use of stormwater BMPs other than those listed in the *Manual* may be approved on a case-by-case basis if the applicant can demonstrate that these BMPs provide equivalent or higher pollutant removal.

- ii. **Vegetated Buffer:** In areas that are not subject to a state Riparian Area Protection Rule, a 30-foot wide vegetated buffer must be maintained adjacent to streams, rivers and tidal waters as specified below.

- a. The width of the buffer shall be measured horizontally from:

1. The normal pool elevation of impounded structures,
2. The streambank of streams and rivers, and
3. The mean high waterline of tidal waters, perpendicular to shoreline.

- b. The vegetated buffer may be cleared or graded, but must be planted with and maintained in grass or other appropriate plant cover.

- c. The DWQ may, on a case-by-case basis, grant a minor variance from the vegetated buffer requirements pursuant to the procedures set forth in 15A NCAC 02B .0233(9).

- d. Vegetated buffers and filters required by state rules or local governments may be met concurrently with this requirement and may contain coastal, isolated or 404 jurisdictional wetlands.

- iii. **Stormwater Flowing to Wetlands:** Stormwater conveyances that discharge to wetlands must discharge at a non-erosive velocity prior to entering the wetland during the peak flow from the ten-year storm.

- iv. **Projects Below Written Authorization Thresholds:** Projects that are below written authorization thresholds must comply with the version of *Protocol for Stormwater Management Plan (SMP) Review and Approval* that is in place on the date of the certification for the project.
- v. **Phased Projects:** The DWQ will allow SMPs to be phased on a case-by-case basis, with a final SMP required for the current phase and a conceptual SMP for the future phase(s). If the current phase meets the Low Density criteria, but future phase(s) do not meet the Low Density criteria, then the entire project shall be considered to be High Density.

The proposed Protocol for Stormwater Management Plan Approval and Implementation is as follows:

A. Submittal Requirements when the SMP is Approved by a Certified Local Government or Another DWQ Stormwater Program

- i. If the SMP is approved under one of the following stormwater programs implemented by a certified local government (that is in full compliance with the *Stormwater BMP Reviewer Certification Policy*), then the approval shall satisfy the stormwater requirements under the 401 Water Quality Certification and Isolated Wetlands Permit program. A list of all of the certified local governments is posted on the 401 Oversight/Express Permitting Unit website at: <http://h2o.enr.state.nc.us/ncwetlands/>.
 - a. Water Supply Watershed II, III and IV,
 - b. Local Implementation of the NPDES Phase 2 Program,
 - c. Universal Stormwater Management Program,
 - d. Nutrient Sensitive Waters (NSW) Stormwater Nutrient Loading Limits,
 - e. Randleman Lake Water Supply Watershed Stormwater Requirements, or
 - f. Local Implementation of the Goose Creek Watershed Program;
- ii. If the SMP is approved under one of the following stormwater programs implemented by the DWQ, then the approval shall satisfy the stormwater requirements under the 401 Water Quality Certification and Isolated Wetlands Permit Programs.
 - a. Twenty Coastal Counties,
 - b. Outstanding Resource Water (ORW),
 - c. High Quality Waters (HQW), or
 - d. Phase II NPDES Stormwater Program (state-implemented).
- iii. If the project is subject to one of the programs listed in Items (i) or (ii) above, then the application must include one of the following items:
 - a. A valid approval letter from the appropriate DWQ office or certified local government indicating that the proposed activity has an approved SMP **and** one copy of the approved SMP (including plan details, calculations and other supporting information), OR
 - b. A set of stormwater plan details and calculations stamped as "Approved" by the appropriate DWQ office or certified local government, OR
 - c. A letter from the applicant that indicates that a SMP has been submitted for DWQ office or certified local government approval under one of the programs listed above. Any 401 Water Quality Certification or Isolated Wetlands Permit approved under this scenario shall be conditioned so that the proposed impacts may not commence until the appropriate SMP approval has been granted.

- iv. Per the authority provided in 15A NCAC 2H .0506, the DWQ reserves the right to provide comments to certified local governments of special provisions that may need to be incorporated into locally-reviewed SMPs in order to provide an enhanced level of protection to sensitive watersheds, or to provide an enhanced level of stormwater control on unique projects.

B. Submittal Requirements for SMPs that Require 401 Oversight/Express Unit Approval

- i. A SMP must be submitted to the 401 Oversight/Express Permitting Unit per the requirements in the stormwater condition of the General Certification.
- ii. For Low Density Projects, the application must include two copies of a DWQ Low Density Supplement Form with two copies of all required items. The Low Density Supplement Forms is available at: http://h2o.enr.state.nc.us/su/bmp_forms.htm.
- iii. For High Density Projects, the application must include two copies of a DWQ BMP Supplement Form (including both worksheets, Design Summary and Required Items Checklist) with two copies of all required items for each structural BMP that is proposed. BMP Supplement Forms are available at: http://h2o.enr.state.nc.us/su/bmp_forms.htm.
- iv. Per the authority provided in 15A NCAC 2H .0506, the DWQ reserves the right to add specific stormwater management requirements on a case-by-case basis in order to ensure that a proposed activity will not violate water quality standards. Two special cases will be handled as explained below.
 - a. The DWQ may approve Low Impact Developments (LIDs) that meet the requirements set forth in the *North Carolina Low Impact Development Guidance Document* once it is completed. Prior to completion of the *North Carolina Low Impact Development Design Manual*, LID developments shall follow the approach set forth in the *Low Impact Design Manuals* published by Prince Georges County, Maryland in July 1999.
 - b. The DWQ may add special conditions to Brownfields development projects due to the complexities of the contaminants and remediation practices employed.

c. SMP Approval and Implementation Procedures

- i. The SMP must be approved in accordance with the procedures described above before *any* impacts authorized in the 401 Water Quality Certification or Isolated Wetlands Permit may occur.
- ii. If a development is phased, then the SMP for each future phase must be approved in accordance with the procedures described above before any impacts or land disturbance associated with that phase may occur.
- iii. The approved SMP must be constructed and operational before any permanent building or other structure is occupied at the site. If a development is phased, then the approved SMP for each future phase must be constructed and operational before any permanent building or other structure associated with that phase is occupied.
- iv. The approved SMP as well as drainage patterns must be maintained in perpetuity.
- v. The SMP may not be modified without prior written authorization from the SMP approval authority. The SMP modification must be approved in accordance with the procedures described above prior to the commencement of the modifications.

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