DEPARTMENT OF THE ARMY

Wilmington District, Corps of Engineers 69 Darlington Avenue Wilmington, North Carolina 28403-1343 April 24, 2017

Regional General Permit No. <u>2016-00163 (RGP 163)</u> Name of Permittee: <u>Charlotte Storm Water Services</u>

Effective Date: April 24, 2017

Expiration Date: 5 years after issue date

DEPARTMENT OF THE ARMY REGIONAL GENERAL PERMIT

A regional general permit (RGP) to perform work in or affecting navigable waters of the United States (U.S.) and waters of the United States, upon recommendation of the Chief of Engineers, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby issued by authority of the Secretary of the Army by the

District Commander U.S. Army Engineer District, Wilmington Corps of Engineers 69 Darlington Avenue Wilmington, North Carolina 28403-1343

TO AUTHORIZE THE DISCHARGE OF DREDGED OR FILL MATERIAL IN WATERS OF THE UNITED STATES (U.S.), INCLUDING WETLANDS, ASSOCIATED WITH STORM WATER DRAINAGE IMPROVEMENT PROJECTS AND FLOOD REDUCTION ACTIVITIES CONDUCTED BY CHARLOTTE STORM WATER SERVICES (CSWS), IN MECKLENBURG COUNTY, NORTH CAROLINA.

Activities authorized are:

- a. Maintenance and repair of existing open water ponds to include repairs on the dam and/or outlet structures, dredging of accumulated sediment, installation of forebays, bank stabilization and in-stream enhancements on stream channels located immediately upstream and downstream of the pond.
- b. Maintenance and repair of existing culverts and piped drainage systems to include culvert replacement, minor culvert extensions, associated bank stabilization structures/techniques immediately upstream and downstream of culverts, dissipater pads and minor in-stream grading activities and sediment removal immediately upstream and downstream of the culvert/piped structure.

c. Stream channel enhancement and rehabilitation activities to accommodate increased storm water flows and flood reduction measures which include minor in-stream grading, bank stabilization, installation of bio-engineering structures, construction of bankfull benches, and riparian plantings.

Special Conditions

- a. Provided the applicant meets all Special and General Conditions attached to this RGP, written notice/application in the form of a Preconstruction Notification (PCN) to, and written confirmation from the Wilmington District Corps of Engineers (Corps), is not required for the activities described above in cases where:
 - 1) The project results in the permanent loss of less than 150 linear feet of stream channel, 0.10 acre of wetlands, and/or 0.5 acres of open water. Loss of Waters of the United States is defined as, "Waters of the U.S. that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity," 77 Federal Register 34 (21 February 2012) pp10289. For the purposes of this RGP, impacts that would be considered permanent loss to waters of the US may include, but are not limited to, any permanent above grade fill such as new culverts and extensions and installation of rip rap aprons and pre-formed scour pools in the bottom of the channel.
 - 2) The project results in permanent impacts to less than 500 linear feet of stream channel, 0.10 acre of wetlands, and/or 0.5 acres of open water. For the purposes of this RGP, permanent impacts may include, but are not limited to bank stabilization, channel relocation, and conversion of waters/wetlands (e.g. flooding of a stream/wetland, pond drainage to restore a stream channel, and excavation of wetlands to create open water).
 - 3) The project results in temporary impacts less than 1000 linear feet of stream channel, 0.50 acre of wetlands, and/or 5 acres of open water. For the purposes of this notification condition, stream channel enhancement and rehabilitation work is considered to be a temporary impact except for cases where stream channel length is lost.
- b. This RGP may not be used to authorize compensatory mitigation projects.
- c. Activities in which CSWS is constructing culverts for the main purpose of creating high ground on residential and/or commercial properties at the request of the property owner are not authorized by this RGP.
- d. This RGP may not be used in cases where the stream channel or wetland proposed for impact is classified as High Quality by the North Carolina Stream Assessment Method (NCSAM) or by the North Carolina Wetland Assessment Method (NCWAM).
- e. This RGP authorizes temporary dewatering structures and activities.
- f. For stream channel enhancement and rehabilitation work, natural channel design and

bioengineering techniques should be used. This permit does not authorize stream channel deepening and widening beyond the natural dimensions of the channel.

g. The use of rip rap for bank stabilization activities and outlet protection should be minimized where practicable. The construction of pre-formed scour pools at culvert outlets are authorized by this permit provided their footprint is minimized to the maximum extent possible. For the purposes of the notification condition above (a), pre-formed scour pools are considered a permanent loss in cases where there are no pre-existing rip rap dissipater pads.

h. For the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by altering the width or depth of the stream profile in connection with the construction activity. The width, height, and gradient of a proposed culvert should be sufficient to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bank-full flow can be used as a comparable indicator. Additional measures may be used to facilitate the passage of aquatic life, to include but not limited to, the use of baffles placed throughout culverts to increase heterogeneity of substrate/habitat/flow and allow for some resting places and refugia in long stretches of piped streams.

Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions.

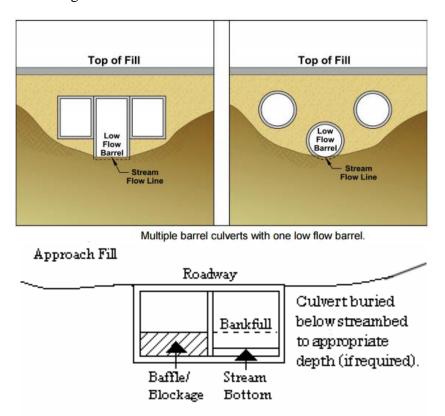
Culverts must be designed and constructed in a manner that minimizes destabilization and head cutting. Destabilizing the channel and head cutting upstream should be considered and appropriate actions incorporated in the design and placement of the culvert.

In cases, where the culvert being constructed is connected to a larger piped drainage system upstream, the culvert burial requirements specified above are automatically waived without prior notification. In cases where the culvert being constructed is not to be connected to a larger piped drainage system upstream, waiver from the depth specifications in this condition may be requested in writing. The waiver will be issued if it can be demonstrated that the proposal would result in the least impacts to environment.

Culverts placed within riparian and/or riverine wetlands must be installed in a manner that does not restrict the flow and circulation patterns of waters of the United States. Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

Where feasible and for the installation of new culverts (vs. extension of existing culverts) bankfull flows (or less) shall be accommodated through maintenance of the existing bank-full channel

cross sectional area. Where feasible, additional culverts at such crossings shall be allowed only to receive flows exceeding bank-full. Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation. The following diagrams show examples of the use of additional culverts to allow the passage of flows exceeding bank-full:



The width of the culvert shall be comparable to the width of the stream channel. If the width of the culvert is wider than the stream, the culvert shall include baffles, benches and/or sills to maintain the width of the stream channel (see above diagram). A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable or necessary to include baffles, benches or sills and the design would result in less impacts to the aquatic environment.

- i. When using concrete as a building material, live or fresh concrete, including bags of uncured concrete, may not come into contact with the water in or entering into waters of the US. Water inside coffer dams or casings that has been in contact with wet concrete shall only be returned to waters of the US after the concrete is set and cured and when it no longer poses a threat to aquatic organisms.
- j. For the use of riprap material for bank stabilization, the following measures shall be applied: Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters. The placement of filter fabric is not required if the riprap will be pushed or "keyed" into the bank of the waterbody. A waiver from the specifications in this Regional Condition may be requested in writing. The placement of riprap shall be limited to the areas

depicted on work plan drawings; The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect; It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions; The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete (with no exposed re-bar present); Rip rap will not be placed in a manner that prevents or impedes fish passage. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional Condition would result in greater adverse impacts to the aquatic environment

- k. If riprap stabilization is needed, it should be placed only on the stream banks, or, if it is necessary to be placed in the stream bed, the finished top elevation of the riprap should not exceed that of the original stream bed.
- l. Discharges of dredged or fill material into waters of the U.S., including wetlands, must be avoided and minimized to the maximum extent practicable. The width of the culvert shall be comparable to the width of the stream channel. If the width of the culvert is wider than the stream channel, the culvert shall include baffles, benches and/or sills to maintain the width of the stream channel. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable or necessary to include baffles, benches or sills and the design would result in less impacts to the aquatic environment.
- m. Upon completion of any work authorized by this RGP, all temporary fills will be completely removed from waters of the U.S. and the areas will be restored to preconstruction conditions, to include pre-project elevations and contours, restoring natural hydrology and stream corridors, and reestablishing native vegetation/riparian corridors. This work will be completed within 60 days of completion of project construction. If vegetation cannot be planted due to the time of the year, all disturbed areas will be seeded with a native mix appropriate for the impacted area, and vegetation will be planted in the fall. A native seed mix may contain non-invasive small grain annuals (e.g. millet and rye grain) to ensure adequate cover while native vegetation becomes established.
- n. All activities authorized by this RGP shall, to the extent practicable, be conducted "in the dry", with barriers installed between work areas and aquatic habitat to protect that habitat from sediment, concrete, and other pollutants.
- o. Heavy equipment should be operated from the bank whenever possible. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of stream water from fuels, lubricants, hydraulic fluids or other toxic materials. Equipment used in stream channels should be clean and in good working order. Adequate petroleum spill containment should be readily available on the construction site.
- p. Tree and shrub cover along the stream should be retained as much as possible in order to stabilize the stream banks.
- q. CSWS will track all projects that meet the non-notifying criteria as outlined in condition (a)

and provide an annual report to the appropriate Corps and N.C. Division of Water Resources Project Managers. The report will at a minimum include the name of the project, coordinate locations and nearest street name, and summary of impacts to waters of the U.S.

r. For any activity that results in a loss of more than 150 linear feet of stream, the permittee shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment. Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides a project activity-specific waiver of this requirement.

General Conditions.

- a. Except as authorized by this RGP or any Corps approved modification to this RGP, no excavation, fill or mechanized land-clearing activities shall take place within waters or wetlands, at any time during the project construction or maintenance. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.
- b. Authorization under this RGP does not obviate the need to obtain other federal, state, or local authorizations.
- c. All work authorized by this RGP must comply with the terms and conditions of the applicable Clean Water Act Section 401 Water Quality Certification for this RGP issued by the North Carolina Division of Water Resources.
- d. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Where feasible, the permittee shall include the use of biodegradable erosion-control material. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).
- e. The activities authorized by this RGP must not interfere with the public's right to free navigation on all navigable waters of the U.S. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for a reason other than safety.
- f. The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause

unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

- g. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the U.S. and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the affected water of the U.S. to its former conditions.
- h. The permittee will allow the Wilmington District Engineer or his representative to inspect the authorized activity at any time deemed necessary to assure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.
- i. This RGP does not grant any property rights or exclusive privileges.
- j. This permit does not authorize any injury to the property or rights of others.
- k. This RGP does not authorize the interference with any existing or proposed federal project.
- 1. In issuing this permit, the Federal Government does not assume any liability for the following:
- (1) Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- (2) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest.
- (3) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - (4) Design or construction deficiencies associated with the permitted work.
- (5) Damage claims associated with any future modification, suspension, or revocation of this permit.
- m. Authorization provided by this RGP may be modified, suspended or revoked in whole or in part if the Wilmington District Engineer, acting for the Secretary of the Army, determines that such action would be in the best public interest. The term of this RGP shall be five (5) years unless subject to modification, suspension or revocation. Any modification, suspension or revocation of this authorization will not be the basis for any claim for damages against the U.S. Government.
- n. This RGP does not authorize any activity, which the District Engineer determines, after any necessary investigations, has the potential to cause effect:

- (1) Historic, cultural or archeological sites listed in or eligible for inclusion in the National Register of Historic Places as defined in the National Historic Preservation Act of 1966 and its codified regulations, the National Historic Preservation Amendment Acts of 1980 and 1992, the Abandoned Shipwreck Act of 1987 and the Native American Graves Protection and Repatriation Act.
- (2) Sites included in or determined eligible for listing in the National Registry of Natural Landmarks.
- o. No activity is authorized under this RGP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under this RGP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed or unless the project meets criteria set forth between the Corps and the FWS via a Programmatic Agreement (PA) concerning the affected species and/or critical habitat. In regards to the threatened Northern long-eared bat (NLEB) (*Myotis septentrionalis*), see General condition "z."
- p. Permittees are advised that development activities in or near a floodway may be subject to the National Flood Insurance Program that prohibits any development, including fill, within a floodway that results in any increase in base flood elevations. This RGP does not authorize any activity prohibited by the National Flood Insurance Program.
- q. The permittee must make every reasonable effort to perform the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife and natural environmental values.
- r. The permittee must maintain any structure or work authorized by this permit in good condition and in conformance with the terms and conditions of this permit. The Permittee is not relieved of this requirement if the Permittee abandons the structure or work. Transfer in fee simple of the work authorized by this permit will automatically transfer this permit to the property's new owner, with all of the rights and responsibilities enumerated herein. The permittee must inform any subsequent owner of all activities undertaken under the authority of this permit and provide the subsequent owner with a copy of the terms and conditions of this permit.
- s. At his sole discretion, any time during the processing cycle, the Wilmington District Engineer may determine that this RGP will not be applicable to a specific proposal. In such case, the procedures for processing other appropriate nationwide permits or an individual permit in accordance with 33 CFR 325 will be available.
- t. The activity must comply with applicable FEMA approved state or local floodplain management requirements.
- u. All fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

- v. All excavated material will be disposed of in approved upland disposal areas.
- w. If any previously unknown historic or archeological remains are discovered while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- x. There will be no unreasonable interference with navigation or the right of the public to riparian access by the existence or use of activities authorized by this RGP.
- y. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- **z. NLEB:** The Wilmington District, U.S. Army Corps of Engineers (USACE) has consulted with the United States Fish and Wildlife Service (Service) in regards to the threatened Northern long-eared bat (NLEB) (*Myotis septentrionalis*) and Standard Local Operating Procedures for Endangered Species (SLOPES) have been approved by the USACE and the Service. This condition concerns effects to the NLEB only and does not address effects to other federally listed species and/or to federally-designated critical habitat.
 - A. Procedures when the USACE is lead federal agency* for a project:

The permittee must comply with (1) and (2) below when:

- the project is located in the western 41 counties of North Carolina, to include non-federal aid North Carolina Department of Transportation (NCDOT) projects, OR;
- the project is located in the 59 eastern counties of North Carolina, and is a non- NCDOT project.

*generally, if a project is located on private property or on non-federal land, and the project is not being funded by a federal entity, the USACE will be the lead federal agency due to the requirement to obtain Department of the Army authorization to impact waters of the U.S. If the project is located on federal land, contact the USACE to determine lead federal agency.

- (1) A permittee using a NWP (or an RGP) must check to see if their project is located in the range of the NLEB by using the following website: http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf. If the project is within the range of the NLEB, or if the project includes percussive activities (e.g., blasting, pile driving, etc.), the permittee is then required to check the appropriate website in the paragraph below to discover if their project:
 - is located in a 12-digit Hydrologic Unit Code area ("red HUC" shown as red areas on the map), AND/OR;

• involves percussive activities within 0.25 mile of a red HUC.

Red HUC maps - for the western 41 counties in NC (covered by the Asheville Ecological Services Field Office), check the project location against the electronic maps found at: http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html. For the eastern 59 counties in NC (covered by the Raleigh Ecological Services Field Office), check the project location against the electronic maps found at: https://www.fws.gov/raleigh/NLEB_RFO.html.

- (2) A permittee must submit a PCN to the district engineer, and receive written authorization from the district engineer, prior to commencing the activity, if the activity will involve any of the following:
 - tree clearing/removal and/or construction/installation of wind turbines in a red HUC, AND/OR;
 - bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, (applies anywhere in the range of the NLEB), AND/OR
 - percussive activities in a red HUC, or within 0.25 mile of a red HUC.

The permittee may proceed with the activity without submitting a PCN to either the USACE or the Service, provided the activity complies with all applicable NWP terms and general and regional conditions, or all applicable RGP terms and general and special conditions, and if the permittee's review under A.(1) and A.(2) above shows that the project is:

- located <u>outside</u> of a red HUC (and there are no percussive activities), and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;
- located <u>outside</u> of a red HUC and there are percussive activities, but the
 percussive activities will <u>not</u> occur within 0.25-mile of a red HUC
 boundary, and the activity will NOT include bridge removal or
 maintenance, unless the bridge has been inspected and there is no
 evidence of bat use, OR;
- located in a red HUC, but the activity will NOT include: tree clearing/removal; construction/installation of wind turbines; bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, and/or; any percussive activities.
- B. Procedures when the USACE is not the lead federal agency:

For projects where another federal agency is the lead federal agency - if that other federal agency has completed project-specific ESA Section 7(a)(2) consultation for the NLEB, and has (1) determined that the project would not cause prohibited incidental take of the NLEB, and (2) completed the coordination/consultation that is required by the Service (per the directions on the respective Service office's website), that project may proceed without

notification to either the USACE or the Service, provided the activity complies with all applicable NWP terms and general and regional conditions, or all applicable RGP terms and general and special conditions.

The NLEB SLOPES can be viewed on the USACE website at the following World Wide Web Page: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/. Permittees who do not have internet access may contact the USACE at (910) 251-4633.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Kevin P. Landers Sr. Colonel, U.S. Army District Commander