

SWU-101 Application Form Instruction Sheet

*Do not write in the “WMS Use Only” box at the top of page 1.*

## **Section I General Information**

1. **Project Name** – provide the actual name of the project consistent with the project name that was used on the SEC application. If the project was previously submitted and/or returned under another name, please report the previous project name and project number (if one was assigned) in Section II.3.
2. **Location of the Project** – provide the street address of the facility. Most local governments require a street address for the 911 emergency system. Please provide the 911 street address for the project and the ZIP code with 4-digit extension. Reporting the ZIP code is necessary in order to accurately reflect the project location.
3. **Directions to the Project** – the directions provided must originate from the nearest intersection of 2 major roads (should be the same roads referenced on the vicinity map on the plans).
4. **Latitude and Longitude** – these must be taken and recorded at the Main Entrance to the project. If there is more than 1 main entrance, please specify which entrance was chosen, i.e., north, south, east, west, and/or identify by the road name. Please be careful when entering the numbers on the application.

## **Section II Permit Information**

- 1a. NEW or MODIFICATION or RENEWAL W/ MODIFICATION- If the project has never received a stormwater permit before, then it is a **NEW** project. A project is a **MODIFICATION** if a previously permitted project is being modified. Please note that in the case of a group of non-residential lots covered by a Master Plan Permit, where BUA is allocated to the individual lots and is treated in a permitted BMP, the subsequent development of the individual lots is covered by a separate **NEW OFFSITE** permit, and is not considered a modification to the Master Permit. A project is a **RENEWAL W/ MODIFICATION** if a previously permitted project is being modified at the same time it is being renewed. Note that this also requires the first two pages of the Renewal Application, SWU-102. Renewals not also needing a modification only submit SWU-102.  
1b. If the project is a **MODIFICATION**, please list the existing permit number and its issue date (if you know it) and the status of construction. Check  **Not Started** if the project that was previously permitted was not built. Check  **Partially Completed** if, during the course of construction, something about the project has changed that requires a modification. Check  **Completed** if the project is complete and is being modified for some other reason. **For both Partially Complete and Completed projects, a Designer's Certification must accompany the modified application.** A partial Designer's Certification is needed for Partially Complete projects, and would cover just the BMP itself and any constructed BUA to date. The Designer's Certification for a Complete project would encompass the BMP, the drainage area and the built-upon area.
2. **Specify the type of Project** – check the appropriate box to identify whether the project is Low Density, High Density, Offsite (i.e., one that drains to a previously permitted BMP for treatment), or Universal. The “Other” project type category would include projects with Water Dependent Structures, Public Roads and bridges and those projects to be considered for a Director's Certification.

3. Please let us know what **other permits the project has already applied for or received or**

**that are required.** You will need a Sedimentation Erosion Control Plan if the project will cumulatively disturb more than one acre. You will need a 401/404 wetlands permit if there are any wetlands impacts proposed.

4. Please check the appropriate box as to whether the project is located within 5 miles of a public airport that supports commercial air carriers or general aviation services. See Session Law 2012-200, Part VI. for more information regarding BMP types used.

### **Section III Contact Information**

- 1a. Applicant or Project Owner – who will own the project? This can be a developer, the property owner, the person leasing the property (lessee), the purchaser of the property, a designated government official, a “person” such as a corporation, LLC, general partnership, municipality, individual, etc.,
- 1b. The contact information for the “person” listed in III-1a. If you would like this person to receive email updates regarding the project, please include an email address.
- 1c. Identify who the applicant is, property owner, lessee, purchaser or developer. Then skip to either Section 2a, or 3a for property owner information and other contact information.
- 2a. If the person listed in Section 1a is not the Property Owner, then complete Section 2a. This is the person who owns the property and is legally responsible for the property and who has the authority sell it, and to place deed restrictions on it.
- 2b. The contact information for the “person” listed in 2a. If you would like this person to receive email updates regarding the project, please include an email address.
- 3a. This is the place to provide any other contact name for the project such as the construction supervisor.
- 3b. Contact info for the “person” listed in Section 3a. If you would like this person to receive email updates regarding the project, please include an email address.
4. Please provide information on the local government that will be issuing the building permit. This will assist us in getting a copy of the permit to the correct Building Inspection Office.

### **Section IV Project Information**

1. A brief explanation on **how the stormwater will be treated.** This can be as simple as “Low density with grassed roadside swales” or “Wet Detention Pond” to something more complex, such as “Overall low density with infiltration trench systems to treat areas of the project with a density higher than the overall project.”

3. Which **River Basin** will the project drain to? In North Carolina, there are 17 identified river basins. In the 20 coastal counties, the following river basins can apply: Lumber, Cape Fear, White Oak, Neuse, Tar-Pamlico, Pasquotank, or Chowan.
4. For the 2008 rules the **Total Property Area** is the entire area within the property lines, ABOVE the mean high or normal water lines (MHW or NWL), and includes all non-coastal wetlands located above the MHW line or the NWL. For the Phase II and 1995 rules, only area above the Mean High Water can be included and only a percentage of the isolated wetlands can be included in the site area. Please see the Wetlands Policy document for guidance in calculating the site area.
5. **Coastal Wetlands** can only be identified and flagged by personnel of the Division of Coastal Management, or an appropriately trained person acceptable to DCM. Under the 2008 coastal rules, the amount of Coastal Wetlands above the MHW or NWL must be subtracted from the total Property Area.
6. For the 1995, Phase II and 2008 rules, the area of any surface waters that exist within the property boundaries must also be subtracted from the property area. Surface waters include those shown as blue lines on the USGS maps, hydrologically connected waters and waters that are listed in the Division's Schedule of Stream Classifications, whether they appear on the USGS map or not. Specifically the normal pool surface area of impounded structures, the water surface area of rivers and streams and the MHW of tidal waters must be identified on the plans and their area must be excluded from the Property Area before making the density calculation.
7. The project's resulting project area after all subtractions as noted above are made.
8. The overall **percent impervious** is determined by dividing the total proposed impervious area by the total project area and multiplying by 100.
9. For low density and low density curb outlet projects, there is generally just one **drainage area**, which is the overall project. If the low density project splits drainage basins, with a portion draining to SA waters and a portion draining to non-SA waters, then you would have 2 drainage areas and complete one column per drainage area. Please note that for low density curb outlet swale projects, the individual drainage areas for each curb outlet swale are delineated on a separate plan sheet and are NOT reported as individual drainage areas on the application. If the low density project has one or more BMP's for treatment of runoff from an area of higher density or from a discrete collection system, then it will have a number of drainage areas equivalent to 1 plus however many BMP's there are. For high density projects, there is one drainage area counted for each proposed BMP.
10. Complete the information in the columns for the drainage areas as follows:  
High Density Projects - complete one column for each proposed BMP (excluding swales).  
Low Density:
  - a. Per all versions of the SW rules, a discrete collection system is not allowed. Any area of a low density project with a collection system is considered high density and must provide appropriate treatment measures. A separate column(s) must be completed for the drainage area of the BMP(s) proposed to treat collected areas.
  - b. 2008 rules - If the post-constructed project drains to a single, named receiving water, or to multiple receiving waters that are all classified such that the same density limit applies, and it has no areas with a discrete collection system, then there is only one (1) drainage area.
  - c. 2008 rules - Areas of a low density project with a density higher than the overall density do not require additional BMP's as long as they meet the rest of the low density criteria.
  - d. For projects subject to the 1995 and Phase II rules, no area of the low density project can be of such high density that water quality is threatened. Any area determined to be a "pocket of high density" will require treatment for that runoff, and will be reported in a separate column on the application.
  - e. For all versions of the SW rules, if there are multiple receiving waters with classifications that include both SA and non-SA, then complete one column for the overall project, a separate column for the part of the project draining to SA waters, and a separate column for the part of the project draining to the non-SA waters. It isn't

necessary to split out drainage areas within the non-SA waters, since they all allow the same density limit.

- f. If there is a drainage area within the low density project where runoff is being treated with a BMP, then complete one column for the overall density and a separate column for the BMP.

### **Basin Information Table**

Section 10 of the application is divided into an upper box to describe the Basin Information, and a lower box to list the proposed Impervious Surface Area.

Each BMP has just one drainage area and each column is pre-assigned a default Drainage Area number, 1, 2, 3 or 4. If these default numbers don't work for your project, simply cross out the numbers and use other numbers or letters that match up to the supplement forms, calculations and plans.

The **Receiving Stream Name, Stream Class, and Index Number** can be found in the Schedule of Classifications at <http://portal.ncdenr.org/web/wq/ps/csu/classifications> The stream may be broken up into several segments, each with different classifications. The best way to use the listing is to sort alphabetically first, and note the index numbers of each possible segment and then sort hydrologically. Search for each of the previously noted segments in order by index number and read the associated description. As one moves down the list, the applicable stream segment should be easily determined. If you need assistance, you can submit the Water Quality Classification Request form and topo map to the Regional Office.

#### **Total Drainage Area:**

For Low Density, the **Total Drainage Area** proposed is comprised only of an Onsite Drainage Area component, which is the **Total Project Area** listed in Section IV.7. Since only the property owned by the applicant can be used to calculate the maximum allowed BUA, no offsite drainage area can be included. For **curb outlet swale systems**, where it's possible for offsite drainage area from an adjacent property to drain onto the proposed low density project and subsequently into the curb outlet swales, the **offsite drainage area** and offsite built-upon area would simply be delineated and identified separately on the required drainage area delineation map and accounted for in the swale calculations.

For High Density, the **Total Drainage Area** could be comprised of both an on-site drainage area component and an **Offsite drainage area** component, or just one of these.

**Offsite drainage area** is that area located on adjacent or upstream property that the applicant does not own, and which generates runoff that is draining onto the applicant's property and which will be treated by the currently proposed BMP(s). There is no requirement to collect and treat offsite drainage, however, if the offsite drainage area is not rerouted around the proposed BMP(s), it must be accounted for when sizing the BMP. Keep in mind that under NCGS 77-14, existing drainage features may not be blocked. If there is offsite drainage from an adjacent or upstream property that the applicant does not want to treat in the proposed BMP(s), then the applicant must size an appropriate pipe or swale to route that drainage around the proposed BMP using minimum design standards set by the local government and appropriate engineering calculations. The pipe or swale must be shown on the plans. If the offsite drainage is routed around the BMP, then the "Offsite Drainage Area" and "Offsite Built-upon Area" boxes on the application will be "0" or "n/a".

The Division encourages rerouting offsite drainage from adjoining or upstream property because of the complex legal issues associated with this. The applicant cannot maintain control over the development of property that he/she does not own. If the applicant elects to account for offsite drainage, there must be a recorded legal agreement in place between the

applicant and the owner of the offsite or upstream property, in which the owner of the offsite property agrees to record a deed restriction limiting the maximum amount of built-upon area on the “Offsite” property to be handled by the applicant’s BMP, the locations and sizes of access and drainage easements, how construction and or ongoing maintenance costs will be handled, maintenance responsibility, a list of the legal recourses available to each party should one party fail to hold up their end of the agreement, and any other related legal issues. The **Proposed Impervious Area** is the total BUA brought up from the Impervious Surface Box Total below the Basin Information Box.

The **% Impervious Area** is specific to that drainage area and is calculated as the proposed impervious area divided by the total drainage area for that BMP. This drainage area is subject to the same exclusions as the overall drainage area listed in Section IV.4, 5 and 6.

**On-site Buildings / Lots** – for commercial type projects, the number reported here will be for the proposed building(s) located within the property. For subdivision projects this number will represent the total BUA allocated to the proposed lots. For subdivisions, do not attempt to break down the individual lot BUA into its smaller components of roof area, sidewalk, driveway, etc. Since you don’t know what will be built on the lot, you won’t be able to. The BUA for the lots within a subdivision is simply Lot BUA and is not broken down any further.

**On-site Streets** is the total built-upon area for the proposed streets within the right-of-way, or any service roads or alleys located within the project and any pavement located in easements. New streets located outside of the project area to provide access to the project or NCDOT mandated widening to existing streets that is proposed outside of the property boundary are also included in this number.

**On-site Parking** is the total built-upon area for the proposed parking lots. If the parking lot is paved with a permeable pavement that will be partially credited as managed grass, the reported BUA would reflect the BUA amount after the credit is applied. The Permeable Pavement supplement form provides the necessary steps to determine the credited amount.

**On-site Sidewalks** is the total built-upon area for the proposed sidewalks.

**Other On-site** covers any other proposed built-upon area shown on the plans that is not future area, and is not already listed. For subdivisions, this may include amenity areas, recreational facilities, pump stations, clubhouses, etc. This does not include any offsite BUA.

**Future** BUA is that amount of BUA that is not shown on the plans, but which will be built at a future time. For high density projects, the future BUA listed will utilize the permitted BMP to treat the runoff. For subdivisions, this could include amenity areas, recreational facilities, clubhouses, etc. This does not include offsite BUA.

**Offsite** BUA is that amount of built-upon area that currently exists or that has been allocated to an offsite drainage area that is not being rerouted around the projects BMP.

**Existing BUA** is that amount of existing built-upon area that will remain on the project after development and that will not be removed. Existing BUA that will be removed and replaced with new BUA or which will be removed and not replaced, should not be reported on the application.

**Total** is the total of all the listed built-upon areas in that column.

11. **Determination of Offsite Drainage Area / Impervious Area** – this is where the details of how the Offsite Drainage Area and Offsite Built-upon Areas were determined. In general, an as-built survey or a site visit in addition to review of topographic maps are needed to make this determination.

## **Section V. Supplement and O&M Forms**

Each specific BMP, including roadside swales under low density, has a complementary supplement form, checklist and Operation and Maintenance agreement that must be completed, signed, notarized and submitted as part of the application. These forms are available on the Division's website at [http://portal.ncdenr.org/web/lr/state-stormwater-forms\\_docs](http://portal.ncdenr.org/web/lr/state-stormwater-forms_docs).

Photocopied signatures are not acceptable. Each BMP must have a separate supplement, checklist, and a separate, original, signed O&M, except for Level Spreaders (LS) and Vegetated Filter Strips (VFS) which may have only one signed O&M agreement that applies to all of the LS and VFS on site.

The information reported on the supplement forms must be mathematically correct and must be consistent with the plans and calculations.

The supplement form does not take the place of detailed calculations.

The first page of each supplement form must be signed and sealed by an appropriate design professional, holding a license that allows him/her to design that specific type of project.

## **Section VI Submittal Requirements**

This section provides a list of all the individual components that make up a complete stormwater permit application. In order to accept the application, all of the listed components must be initialed and submitted with the application. Any items that do not apply or are not initialed must be addressed in the narrative as to why it is not part of the application. Please do not type initials. Typewritten initials indicate that the typist has verified the items rather than the applicant or consultant. It is no more acceptable to typewrite your initials than to typewrite your signature.

1. The original **signed application** form and one copy. Original signatures only.
2. The original and one copy of the notarized **Deed Restriction** document, for all projects that involve the subdivision of property.
3. The original **supplement forms**, signed, sealed and dated and the original signed O&M agreements, one for each BMP, except Level Spreaders and Vegetated Filter Strips, where one signed O&M can be used for all proposed LS & VFS.
4. The appropriate **application fee** currently set at \$505.00 for the regular program. If the application is Express, please contact the applicable Regional Office Express Coordinator to schedule the review and get the correct fee. If the application is for Kure Beach, under the Universal program, a total of 2 checks is required: one made out to the Town of Kure Beach for \$255.00 and one made out to DENR - DEMLR for \$250.00.
5. A detailed **narrative** is necessary in order to understand how the stormwater will be treated for each drainage area in the project. Any abnormalities or difficulties with the site should be discussed in detail.
6. The **USGS maps** are an invaluable tool for identifying the location of a project as well as the named receiving waters. For those projects draining to a receiving stream that is classified as SA, the project location must be shown to scale and the ½ mile radius from the project must be drawn on the map.
7. Detailed **design calculations**, signed, sealed and dated. The calculations should not be a listing of the design items provided since that information is already shown on the supplement form. The calculations must show all data, assumptions, equations, runoff coefficients, etc., and all the work to arrive at the numbers. Hydrologic program outputs are helpful as supporting documents, but do not take the place of step-by-step calculations.

**8. The plan requirements:**

- a. The development / project name, consistent with the application and supporting documents.
  - b. Engineer and firm name.
  - c. The Location Map. The 2 major roads identified in the directions to the site provided in Section I.4 of the application should now be shown on the vicinity map on the plans as well as any other roads, and distances to those intersections. We encourage the consultant to list both the local street name and the NCSR number, if there is one.
  - d. A legend listing all of the symbols (existing and proposed) shown on the plans. Commonly listed in the legend are contours, right-of-way, property lines, easements, utility lines, drainage features, etc.
  - e. A north arrow.
  - f. The scale of the plan, listed as both numerically and graphically as a bar scale.
  - g. The revision number of the plan.
  - h. Identify, delineate and calculate the amount of surface waters that are subject to the buffer requirement or that will be excluded from the project area.
  - i. Property lines with bearings and distances.
  - j. Site layout plans with dimensions of all the proposed BUA. Note that you do not guess at the lot development nor at the designated future areas on the plans with BUA allocations.
  - k. Existing and proposed contours. Please note that if the existing contours indicate that drainage from an adjacent property is entering the project, and the application does not address offsite drainage, either by rerouting it or by accounting for it in the BMP design, the application will be returned. The proposed grading plans must contain actual elevations, not just flow arrows.
  - l. Details of roads, sidewalks, drainage features, piped collection systems, and the proposed stormwater controls.
  - m. Identify, delineate and calculate the amount of coastal wetlands area. Also identify and delineate any non-coastal or isolated wetlands including any impacts to them. If you note that there are no wetlands on the property, please provide the name, mailing address and phone number of the person who made that determination, and submit a copy of any documentation from that person regarding the determination that there are no wetlands. The person should be qualified and trained in the identification of wetlands.
  - n. Existing drainage, easements, pipes, and runoff calculations. If there is offsite drainage, the existing contour and drainage features within the offsite area must be shown as well.
  - o. Drainage area delineation is important. Provide a map showing the site's existing and proposed contour, buildings, roads, parking lots, lot lines, BMP's, swales, etc., and draw in the single drainage area for each proposed BMP or curb outlet swale. It is not required that the drainage area of each catch basin and/or pipe be drawn. In fact, this only makes it that much more difficult to read the map and determine what areas drain to what BMP. Color-coded highlighted maps drawn over the grading plan are best. Each Drainage Area must be numbered to correspond to the numbered column on the application for that BMP. Offsite drainage areas must be included on the drainage area map if they are not rerouted.
  - p. The 50' buffer must be shown on the plan. The buffers are applied to surface waters, not wetlands, and are measured from the normal pool of impoundments, the banks or rivers and streams, and the mean high water line or normal water line of tidal waters. The buffers may include wetlands.
- 9. Soil reports** are needed for all sites that propose a BMP or curb outlet swales. The soils report must contain findings based on an actual field visit. For infiltration systems, the soils report must contain a determination of the soil type, the hydraulic conductivity and the elevation of the Seasonal High Water Table. Bore logs are required that note the locations

- of each boring. For curb outlet swale systems and most other non-infiltration BMP's, only the Seasonal High Water Table elevation is needed.
10. A copy of the current **property deed**, along with the Deed Book and Page No.
11. **Corporations and Limited Liability Corporations** must be registered with the NC Secretary of State, active and in good standing, in order to receive a permit. The person signing the application for a corporation must be at least the level of vice president. The person signing the application for an LLC must be either the Manager, if the LLC is manager-managed, or a Member, if the LLC is member-managed. Additionally, the person signing the application must be either listed in the Articles of Incorporation and identified with their title, or listed on the latest annual report with their title. These documents can be downloaded from the Secretary of State website at <http://www.secretary.state.nc.us/Corporations/CSearch.aspx> , and must be submitted with the application.

## **Section VII Deed Restrictions and Protective Covenants**

The Division has posted documents to the website which contain all of the necessary deed restriction language that needs to be recorded, depending on what type of project is being proposed and the rule under which the permit is issued.

The “per lot BUA” amount must be recorded as a specific number, not as a percentage of the lot area.

Where the ***lot BUA limits are different for each lot***, please include an attachment to the Deed Restriction document that lists each lot and its BUA limit. A separate lot listing is not needed if they all have the same BUA assigned to them.

Projects located within a Military Base and stand-alone projects that do not involve the subdivision and sale of property are not required to provide or record deed restrictions.

Please note that projects authorized to utilize a previously approved BMP, i.e., an ***“Offsite” project***, do not need to provide a separate recorded deed restriction. A copy of the previously approved and recorded deed restrictions as required by the Master permit, and a copy of the Designer's Certification, must either be submitted to DEMLR with the lot's offsite stormwater application, or have been submitted previously and are already on file.

For all other development that involves the subdivision of property, the required deed restriction document must be signed and notarized, and submitted with the Stormwater application.

The same forms are used for ***permit modifications*** that require an amendment to the previously recorded deed restrictions. It is up to the applicant to make sure the correct deed restriction language is transmitted to the attorney to be recorded and that it is recorded BEFORE the first lot is sold.

## **Section VIII Consultant Information and Authorization**

This is the Section where the applicant lists the contact information for the consultant. This is not the place to designate another person to sign the application. Please refer to Section III.3a and III.3b if you wish to provide contact information for someone other than the consultant or applicant.

## **Section IX Property Owner Authorization**

This is where the actual property owner signs and dates the application in the presence of a notary public. If a developer or lessee is involved, the property owner's signature also authorizes the developer or lessee to construct the project as approved. Don't forget to have the notary public fill in, stamp, sign and date the notary public area. Either inked stamps or raised

impression stamps are allowed. Please make sure the Notary Public signs the application containing the original signature of the property owner and not a photocopied signature.

### **Section X Applicant's Certification**

The applicant (developer, lessee) signs and dates the application in the presence of a notary public. Don't forget to have the notary public fill in, stamp, sign and date the notary public area. Either inked stamps or raised impression stamps are allowed. Please make sure the Notary Public signs the application containing the original signature of the applicant and not a photocopied signature.

Other information of Note:

Note that approved guidance documents are available on the website which address certain calculation changes and BMP design situations and provides guidance as to how to solve those situations. Prior to submitting the application, please be sure to look through the applicable guidance and make any necessary changes to the application, plans, and calculations to conform to the guidance. Don't assume that because a design was previously accepted and permitted in the past that it will still meet today's criteria. It's a good idea to get in the habit of either checking the website for updated forms before submitting the project or downloading the forms for every project from the Division's website.

*The most common reasons that an application is returned:*

- 1) *The numbers reported on the supplement don't match the calculations and/or don't match up to what the plans show.*
- 2) *Failing to submit all the necessary application components.*
- 3) *Using the wrong design storm.*
- 4) *Not realizing that the project is within ½ mile of SA waters.*
- 5) *Math errors.*