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| --- | --- | --- | --- |
|  | | **No Stormwater Collection System as defined in**  **15A NCAC 02H .1002(48)** | **Stormwater Collection System as defined in**  **15A NCAC 02H .1002(48)** |
| **BUA < 6%** | | * Vegetated conveyances only * Disconnect impervious cover from conveyances * Disperse IC-concentrated flows | * Treat site runoff from 1" storm w/ primary SCM, including volume reduction requirement (see below), calculated w/ curve number method   OR   * Treat site runoff from 90th percentile storm w/ primary SCM |
| **6% ≤ BUA < 12%** | | * Vegetated conveyances only * Non-transportation impervious cover   + Disconnect from conveyances   + Disperse concentrated flows * Transportation impervious cover   + Treat w/ primary SCM or runoff-reducing secondary SCM |
| **12% ≤ BUA** | **Stream**  **Protection**  **Criteria** | *Potential Options for Initial Discussion*   * Control the 2yr/24hr post-development peak flow rate to 50% of the 2yr/24hr pre-development level   OR   * Control the 2yr/24hr post-development peak flow rate to the 1yr/24hr predevelopment level   OR   * Detain the volume difference between the post-development 1yr/24hr storm and the pre-development 1yr/24hr storm, releasing half the volume over no less than 24 hours | |
| **Water**  **Quality**  **Treatment**  **Criteria** | * Treat site runoff from 1" storm w/ primary SCM, including volume reduction requirement (see below), calculated w/ curve number method   OR   * Treat site runoff from 90th percentile storm w/ primary SCM | |

**Notes**

* 1. For purposes of implementing stormwater programs, "built-upon area" means impervious surface and partially impervious surface to the extent that the partially impervious surface does not allow water to infiltrate through the surface and into the subsoil (N.C.G.S.143-214.7(b2)). "Built-upon area" does not include a surface of number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric. In order to maintain this exemption:
* The #57 stone may not be mixed with other aggregate material.
* The #57 stone and geotextile fabric may not be placed on top of an impervious material, such as crusher run or asphalt.
* The #57 stone area may not use an underdrain system that discharges without treatment.
* The soil on which the 57 stone will be placed (subgrade) should not be mechanically compacted prior to installation.

Although #57 stone laid on geotextile fabric and trails that meet the minimum hydraulic conductivity standard are not considered built-upon area to determine whether a project is high density or low density, these areas shall be accounted for in the design of SCMs required for post-construction stormwater control. Per 15A NCAC 02H .1050, SCMs shall be sized to account for runoff from all surfaces draining to the system unless the applicant can demonstrate that those areas will not produce stormwater runoff. The requirement to account for runoff from all surfaces for purposes of SCM sizing is consistent with rule 15A NCAC 2H .1003(3).

* 1. These post-construction stormwater requirements would not apply to “public linear transportation projects” as defined in Rule 15A NCAC 02H .1002(39). Linear transportation facilities within a common plan of development would not meet exclusions specified in 15A NCAC 02H .1001(1) and would therefore be subject to these post-construction stormwater regulations.
  2. Permeable pavement constructed according to DEQ’s SCM Manual is exempted from BUA calculations.
  3. These post-construction stormwater requirements are intended to apply to the entity who prepares an initial plat and does initial clearing and site prep for a “common plan of development” as defined in 15A NCAC 02H .1002. Post-construction stormwater controls should be designed according to a projected BUA percentage on the CPOD. The builder on individual parcels must conform to the approved stormwater plan unless a revision is made to the initial stormwater permit. Local governments will be allowed to require over-treatment to allow for eventual expansions of BUA.

**Definitions**

Development (§ 143-214.7(a1)(1)): Any land-disturbing activity that increases the amount of built-upon area or that otherwise decreases the infiltration of precipitation into the subsoil. When additional development occurs at a site that has existing development, the built-upon area of the existing development shall not be included in the density calculations for additional stormwater control requirements, and stormwater control requirements cannot be applied retroactively to existing development, unless otherwise required by federal law.

Development Excluded (adapted from 15A NCAC 02B .0731). The following development activities shall not be subject to this Rule:

(1) Projects disturbing less than:

(A) one acre for single family and duplex residential property and recreational facilities; and

(B) one-half acre for commercial, industrial, institutional, multifamily residential, or local government land uses with the following exception: Projects below one-half acre that would replace or expand existing structures on a parcel, resulting in a cumulative built upon area for the parcel exceeding six percent, shall be subject to Paragraph (e) of this Rule;

(2) Development of an individual single-family or duplex residential lot that:

(A) Is not part of a larger common plan of development or sale as in 15A NCAC 02H .1002; and

(B) Does not result in greater than six percent built upon area on the lot;

(3) Existing development as defined in rule 15A NCAC 02H .1002;

(4) Redevelopment as defined in G.S. 143-214.7(a1)(2); and

(5) Activities subject to requirements of the High Rock Lake Agriculture rule~~, 15A NCAC 02B .0732~~.

Transportation Impervious Cover: Uncovered, paved or hardened surfaces used by vehicles, including parking areas, driveways, and roads

Primary SCMs: Bioretention, Infiltration, SW Wetland, Permeable Pavement, Wet Pond, Sand Filter, Rainwater Harvesting, StormFilter, Silva Cell, others specified in NC Stormwater Design Manual

Runoff-reducing Secondary SCMs: DIS; LS-FS; Treatment Swale;

Slow filtered discharge:

**Volume Reduction Requirement (SCS method)**

Portion of runoff from 1" storm that is required to be achieved via evapotranspiration, infiltration, or slow filtered discharge

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| --- | --- |
| **Hydrologic Soil Group** | **Volume Reduction Requirement** |
| A | 0.38 |
| B | 0.26 |
| C | 0.13 |
| D | 0.07 |

**Stream Protection Criteria**

Options:

* Control the 2-year, 24-hour post-development peak flow rate to 50 percent of the 2-year, 24-hour pre-development level
* Control the 2-year, 24-hour post-development peak flow rate to the 1-year, 24-hour predevelopment level
* Detain the volume difference between the post-development 1yr/24hr storm and the pre-development 1yr/24hr storm, releasing half the volume over no less than 24 hours

Exemptions:

* The entire channel protection volume is recharged to groundwater
* Sites less than or equal to one acre of impervious cover
* Compliance with the stream protection criteria above can be demonstrated to result in no benefit to current and future downstream development
  + this will be specified in more detail after further analysis
  + the intention is to provide flexibility in situations where receiving waters are so large that downstream hydrologic flow mitigation is a moot point, and only nutrient treatment matters