A-9. Vegetated Setbacks

Importance of Vegetated Setbacks

Vegetated setbacks (also commonly referred to as vegetated buffers) are areas of natural or established vegetation adjacent to surface waters. They are very effective in filtering sediment, nutrients, heavy metals, and other contaminants that can harm fish and other wildlife and degrade water quality. Vegetated setbacks also slow stormwater runoff and stabilize stream banks. All of these functions help to protect our economically-vital resources, such as our drinking water supplies, fishing and shellfishing industries, and recreational beaches. Therefore, vegetated setbacks are regulated under various water quality programs.

What do the rules say?

15A NCAC 02H .1003(4) VEGETATED SETBACKS
Vegetated setbacks shall be required adjacent to waters as specified in the stormwater rules in which the project is subject…in addition to the following requirements applicable to all vegetated setbacks:

(a) The width of a vegetated setback shall be measured horizontally from the normal pool elevation of impounded structures, from the top of bank of each side of streams and rivers, and from the mean high waterline of tidal waters, perpendicular to the shoreline;

(b) Vegetated setbacks may be cleared or graded, but shall be replanted and maintained in grass or other vegetation;

(c) Built-upon area that meets the requirements of G.S. 143-214.7(b2)(2) shall be allowed within the vegetated setback;

(d) Built-upon area that does not meet the requirements of G.S. 143-214.7(b2)(2) shall be allowed within a vegetated setback when it is not practical to locate the built-upon area elsewhere, the built-upon area within the vegetated setback is minimized, and channelizing runoff from the built-upon area is avoided. Built-upon area within the vegetated setback shall be limited to:

(i) Publicly-funded linear projects such as roads, greenways, and sidewalks;

(ii) Water Dependent Structures; and

(iii) Minimal footprint uses such as poles, signs, utility appurtenances, and security lights.

(e) Stormwater that has not been treated in an SCM shall not be discharged through a vegetated setback; instead it shall be released at the edge of the vegetated setback and allowed to flow through the setback as dispersed flow.

(f) Artificial streambank and shoreline stabilization shall not be subject to the requirements of this Item.
Developing in a Vegetated Setback

Session Law 2018-145 was adopted on December 27, 2018 and made the following changes to N.C.G.S. 143-214.7(b2)(2), which describes the requirements for development in a vegetated setback.

“Development may occur within the area that would otherwise be required to be placed within a vegetative buffer required by the Commission pursuant to G.S. 143-214.1 and G.S. 143-214.7 to protect classified shellfish waters, outstanding resource waters, and high-quality waters provided the stormwater runoff from the entire impervious area of the development is collected and treated from the entire impervious area collected, treated, and discharged so that it passes through a segment of the vegetative buffer and is managed so that it otherwise complies with all applicable State and federal stormwater management requirements.”

Some of the terminology in the General Statute differs from what’s used in the Stormwater Management regulations. The following is how the NCDEQ Stormwater Program interprets certain terms:

The term “vegetated buffers” is interpreted to have the same meaning as “vegetated setbacks.”

15A NCAC 02H .1002 defines a vegetated setback as “an area of natural or established vegetation adjacent to surface waters, through which stormwater runoff flows in a diffuse manner to protect surface waters from degradation due to development activities.”

The term “treated” is interpreted to mean that projects must meet the definition of “runoff treatment.”

As defined in 15A NCAC 02H .1002, to meet runoff treatment on a project “…the volume of stormwater runoff generated from all of the built-upon area of a project at build-out during a storm of the required storm depth is treated in one or more primary SCMs or a combination of Primary and Secondary SCMs that provides equal or better treatment.”

The term “impervious area” is interpreted to have the same meaning as “built-upon area.”

N.C.G.S. 143-214.7 defines built-upon area as “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.”
What This Means for New Development

15A NCAC 02H .1003(4)(b) requires vegetated setbacks to be maintained in grass or other vegetation. This means permeable surfaces such as #57 stone or most types of infiltrating permeable pavement do not meet this requirement. However, 15A NCAC 02H .1003(4)(c) allows built-upon area (BUA) that meets the requirements of N.C.G.S. 143-214.7(b2) to be placed in the setback. Per the amended language in N.C.G.S. 143-214.7(b2), BUA may be placed within a vegetated setback provided the entire project meets the requirements for runoff treatment, including treatment of these non-vegetated surfaces located in the setback. Therefore, low density projects and high density projects that meet the runoff volume match standard but not the runoff treatment standard may not place any BUA in a vegetated setback. All projects that place BUA in a setback are considered high density and have only the option of meeting the runoff treatment standard to demonstrate compliance with the regulations. For more information on the differences between runoff treatment and runoff volume match, please see Chapter A-1: Runoff Treatment & Volume Match in this manual.