

# FORSYTH COUNTY STATE WATERS BUFFER MITIGATION-REVEGETATION CHECKLIST

#### **PURPOSE & INTENT**

The provisions of this document are to provide guidance and to outline the requirements for obtaining a variance to encroach into the County's 75-foot impervious setback and/or the 50-foot undisturbed stream buffer. It also serves to provide guidance and to outline the requirements for mitigating unauthorized encroachments into these areas.

#### MITIGATION REQUIREMENTS

Forsyth County acknowledges the beneficial functions of undisturbed stream buffers and impervious setbacks including: water quality protection, pollutant/runoff infiltration, maintenance of base flow water levels, erosion/sedimentation reduction, increased channel/bank stability, stream shading, support of aquatic and terrestrial wildlife habitats, and recreational/aesthetic value. To compensate for impacts to these areas, mitigation should include measures to infiltrate, revegetate, protect, and otherwise maintain and improve function at the same site where the impact will occur. Stream buffers and imperious setbacks serve three main functions: hydrologic, water quality, and aquatic/buffer habitat protection.

The following mitigation requirements were established to address all three functions. All applicants applying for a variance before impacting a stream buffer or impervious setback must comply with the following three components:

## 1. <u>Hydrologic Protection.</u>

The applicant must use onsite minimum stormwater management standards that conform to guidance established in Volume 1, Section 4.2.3 of the Georgia Stormwater Management Manual (GSMM, 2016).

### 2. Water Quality Protection.

The applicant must implement onsite best management practices (BMPs) that address common post-construction pollutants as outlined in Volume 2, Section 4 of the GSMM. Developments with significant parking spaces and/or high-volume traffic areas must also implement BMPs addressing oil and grease as pollutants.

## 3. Aquatic/buffer/impervious setback protection.

To protect habitats, an applicant must restore the impacted area(s) as follows:

- a. 1 times the impacted area, if the restoration occurs onsite
- b. 2 times the impacted area, if the restoration occurs offsite

It is preferred that these mitigation practices be implemented on site. However, they may need to occur off site due to the nature of the project. If the mitigation must take place off site, it must remain within the same 10-digit hydrologic unit code (HUC) watershed as the buffer impact. For large projects covering multiple 10-digit HUC watersheds, the mitigation practices may be completed in any of the affected HUC10 watersheds. The US Geological Survey, the Soil and Water Conservation Service, or EPD can provide maps and delineations of HUC10 watersheds.

#### REVEGETATION REQUIREMENTS

To compensate for proposed intrusions and/or impacts that have already occurred into the impervious setback and/or stream buffer, the designer shall provide native species of trees, shrubs, and ground cover to be consistent with the surrounding landscape as approved by the Forsyth County Arborist.

A mixture of native plants shall be selected from the County's Recommended list for Conservation & Natural Areas available via the link below:

https://www.forsythco.com/Portals/0/Documents/CommunityDevelopment/CheckLists/Arborist/Planning\_Forsyth\_County\_Recommended\_Plant\_List.pdf

Native trees, shrubs, and ground covers selected must adhere to the following sizes and planting densities:

- Trees must be at least 2-inch caliper or greater and shall be evenly distributed throughout the buffer to
  provide structural diversity comparable with a mature forest.
- Trees must be planted at a minimum density of 160 per acre with a 60% overstory requirement and a 40% understory requirement.
- Spacing for overstory type trees should be 20 feet on center and spacing for understory type trees should be 10 feet on center.
- Shrubs should be a minimum of 3-gallon size plants. Shrubs should be distributed more densely at the outer reaches of the riparian zone to reduce light penetration and recolonization of invasive species.
- Ground cover grasses and plants must be sufficient to provide adequate ground cover as determined by the County Arborist.
- Mulch must be applied to root ball of all new plant material.

# STREAM BUFFER/IMPERVIOUS SETBACK VARIANCE PLAN CHECKLIST

Nar	me:		
Loc	cation:		
Dat	te:		
		lines the requirements for obtaining a variance to encroach into the Co /or the 75-foot impervious setback.	ounty's 50-foot undisturbed
		ysical address, parcel number, and owner/builder contact information umber, and email address).	(mailing address,
	Provide a description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.		
	Provide detail of all existing and proposed structures, including all impervious areas and clearing limits for the entire property.		
	Provide the location of all streams and the extent of all stream buffers/impervious setbacks as measured from the point of wrested vegetation. Include a clear depiction of the area to be disturbed if the variance is granted.		
	Provide calculations of the total square footage of the proposed intrusion into the stream buffer/impervious setback.		
	Provide a Sto Engineering.	ormwater Management Plan, including details for BMPs, as determine	d by the Department of
		ast one alternative plan that does not include an impervious setback in of why an alternative plan is not feasible.	ntrusion or provide an
	Provide docu	umentation of the extraordinary hardship should the impervious setbac	k variance not be granted.
	Provide a det variance is g	stailed plan of the erosion, sedimentation, and pollution control measugranted.	ires proposed if the
	County reveg ground cover	ant schedule (common & botanical names, caliper/plant size, quantity) getation requirements that includes the number of overstory trees, under based on the total amount of disturbance. Also provide the calculation of plants required.	lerstory trees, shrubs, and
		provide copies of the variance application and approval letter from thivision regarding proposed intrusions within the 25-foot state stream	
	be attached,	50% of the cost of materials and labor may be required. A quote from detailing the materials and labor costs. The bond will be in place for a control of the planting to guarantee the survival of the plants.	
		wing note to the plan: "NOTIFY THE FORSYTH COUNTY DEPARTM PLETION OF THE BUFFER REVEGETATION @ 770-781-2165."	IENT OF ENGINEERING
	Provide 3 cop 1" = 40'.	opies of the plan for review on sheet(s) with a minimum size of 11" x 17	7" at a maximum scale of
	All drawings r of Georgia.	must be and be stamped and signed by an appropriately licensed pro-	fessional within the state

# STREAM BUFFER MITIGATION-REVEGETATION PLAN CHECKLIST

Nar	ne:		
Loc	ation:		
Dat	e:		
	s checklist outlines the requirements for mitigating unauthorized encroachments into the undisturbed 50-foot am buffer.		
	Provide a physical address, parcel number, and owner/builder contact information (mailing address, telephone number, and email address).		
	Provide a description of the shape, size, topography, slope, soils, vegetation, and other physical characteristics of the property, including existing structures.		
	Provide the location of all streams and depict the extent of all stream buffers/impervious setbacks as measured from the point of wrested vegetation.		
	Include a clear depiction of the area of unauthorized encroachment in the undisturbed stream buffer, including calculation of the total square footage of the intrusion.		
	Provide a Stormwater Management Plan, including details for BMPs, as determined by the Department of Engineering.		
	Provide a detailed plan and plant schedule (common & botanical names, caliper/plant size, quantity) meeting the Forsyth County revegetation requirements that includes the number of overstory trees, understory trees, shrubs, and ground cover based on the total amount of disturbance. Also provide the calculations used to determine the total number of plants required.		
	A bond for 150% of the cost of materials and labor may be required. A quote from a reputable company mus be attached, detailing the materials and labor costs. The bond will be in place for an 18-month period after the completion of the planting to guarantee the survival of the plants.		
	Add the following note to the plan: "NOTIFY THE FORSYTH COUNTY DEPARTMENT OF ENGINEERING UPON COMPLETION OF THE BUFFER REVEGETATION @ 770-781-2165."		
	Provide 3 copies of the plan for review on sheet(s) with a minimum size of 11" x 17" at a maximum scale of 1" = 40'.		
	All drawings must be and be stamped and signed by an appropriately licensed professional within the state of Georgia.		