

United States Department of Agriculture

# 391 – Riparian Forest Buffer Implementation Requirements

Producer:	Project or Contract:	
Location:	County:	
Farm Name:	Tract Number:	

Practice Lifespan – 15 years



### Practice Purpose(s): (check all that apply)

Reduce transport of sediment to surface water, and reduce transport of pathogens, chemicals, pesticides, and nutrients to surface and ground water

Improve the quantity and quality of terrestrial and aquatic habitat for wildlife, invertebrate species, fish, and other organisms

Maintain or increase total carbon stored in soils and/or perennial biomass to reduce atmospheric concentrations of greenhouse gasses

Lower elevated stream water temperatures

Restore diversity, structure, and composition of riparian plant communities

Other: (Specify)

#### **Description of work:**

#### **NRCS Review Only**

Designed By:	Date	
Checked By:	Date	
Approved By:	Date	

## **GENERAL CRITERIA:**

Follow the Tree and Shrub Establishment Specification Guide Sheet 612 to assure successful tree and shrub establishment.

Select one or more species that are suited to soil and site conditions, and appropriate for the planned purpose(s).

Determine desired stocking levels for trees and/or shrubs based on ecological characteristics of the site and species, and landowner objectives. Plant, seed, and/or naturally regenerate at densities/rates that reflect anticipated seedling mortality, to achieve desired stocking levels in the established stand.

Use NRCS Conservation Practice Standard (CPS) Tree/Shrub Site Preparation (Code 490) to prepare sites for planting, seeding, or natural regeneration, if conditions are not suitable for establishing the desired plants.

Select only viable, high-quality, and adapted plant materials. Select planting stock that conforms to established seed transfer protocols within the State, and complies with minimum standards accepted by the American National Standards Institute (ANSI). Do not plant any species on the Federal or State invasive species or noxious weed lists.

Choose appropriate planting dates and handling methods to increase rates of survival. Select planting techniques and timing appropriate for soil and site conditions. Follow dates in the Tree and Shrub Establishment Specification Guide Sheet 612.

Follow all General and Additional Criteria found in the 391 Conservation Practice Standard (CPS).

### PLANS and SPECIFICATIONS:

### **Objective(s) for establishment:**

Site Description:

Establishment Method (planting, natural regen, etc.):

Buffer Layout and Size									
Riparian forest buffer is planned on:					Min. Buffer Width:	Avg. Buffer Width:			
If one side of stream, which bank? (facing downstream)				cing downstream)	Feet	Feet			
					Total Buffer Length:	Total Acres:			
					Feet	Acres			
	Feel Alles								
Existing	Existing Conditions – List the existing conditions at the site to be established.								
Field No.	Buffer #	Land Use	Planned Buffer Acres	Soils Map Unit	Natural Community Type Likely to Occur				
		• <b>f</b>	1						
Fliter Are	а – Спеск	if required -	- Include esta	ablishment into d	or reference other source (e.g.	Practice 393)			
he He	Buffer is adjacent to cropland and is receiving sediment and nutrients. An area consisting of perennial herbaceous cover must be maintained or established along the up gradient of the riparian forested buffer. Herbaceous strip width will befeet wide (min. width is 15 feet).								
Filter Establishment Specs/Reference:									
<b>Natural Regeneration</b> - Where used, specify existing species, woody stems/acre <sup>1</sup> if known, and describe seed source nearby (age, size, distance, etc.) <sup>2</sup> .									
Site Preparation – Include any requirements or recommendations (Refer to VT Standard 490)									
Remove debris and control competing vegetation to allow for planting and planting equipment. Pest Management including									
weed control may be required. The following method of site preparation is planned:									
	Mechanical (e.g. plowing, disking or rototilling) Chemical control of vegetation								
Hand scalping the area where trees are to be planted Other:									
Additional requirements:									

<sup>1</sup> Refer to VT NRCS Forestry Technical Note #1

<sup>2</sup> Refer to the Seed Source section of the VT NRCS Tree and Shrub Establishment Specification Guide Sheet 612.

Sketches, drawings, and detail drawings are attached.

N/A

A map(s) showing the location of plantings and/or natural regeneration areas is attached.

A soils map(s), and description of soils and Ecological Sites (if available) is attached.

NRCS - VT November 2021

Tree and Shrub Planting Information (Use additional sheets if necessary)						
Tree/Shrub Planting Date:	Vegetative Planting Date: Number to be Planted by Land Unit Protection					
Tree or Shrub Species				and Unit	Protection	
	Type of Stock	Buffer(s) #	Buffer(s) #	Buffer(s) #	Total	
Vegetative (Live Stakes, wattles)						
Rooted Stock <sup>3</sup>						
Total Number Of Rooted Stock To B						

<sup>3</sup> Include live stakes or other vegetative plant materials in this section when they will be used within and for the purpose of buffer establishment versus for streambank stabilization

**Site Planting Notes** – Include information about different planting areas, elevations and communities clarifying why different mixes or species should be planted where specified

Plant Materials Summary – Specify desired sizes and collection info if necessary

**Plant Protection Summary** – Specify tube heights, brush mat sizes and numbers required by plant material type or by species (e.g brush mats on shrubs or tubes on maples)

Planting Methods - # stems, spacing, arrangement (Refer to VT Standard and Specification 612)

For container and bare root stock, plant stock to a depth even with the root collar in holes deep and wide enough to fully extend the roots. Pack the soil firmly around each plant. Cuttings are inserted in moist soil with buds up and buried so that 75% of the stem is underground.

Number of Stems to be Planted per Acre and Spacing:

Planting Arrangement:

Additional requirements:

#### **OPERATION AND MAINTENANCE:**

- Burn or mow the area periodically, if needed to maintain the health of the plant community. Do not conduct maintenance practices and activities during the primary reproductive period of wildlife.
   Exceptions can be considered to maintain the health of the vegetative community if such exceptions do not conflict with agency requirements.
- Control access by vehicles and/or equipment during or after tree/shrub establishment to protect new plants and minimize erosion, compaction and other site impacts.
- Inspect the site at an appropriate time following planting, seeding, and/or natural regeneration to
  determine whether the survival rate for tree and shrubs meets practice and client objectives. Replant or
  provide supplemental planting when survival is not adequate.
- Inspect the trees and shrubs periodically, and protect them from adverse impacts of insects, diseases, competing vegetation, fire, livestock, wildlife, non-functioning tree shelters and/or weed barriers, etc.
- If needed, control competing vegetation until the desired trees/shrubs are established. Control plant species on the Federal or State invasive species and noxious weed lists.
- If needed, apply nutrients to maintain vigor of desirable trees/shrubs.

### Specific Additional Operation and Maintenance Requirements For Your Practice:

## If you have questions regarding this Riparian Forest Buffer practice, contact:

Name:			Tel:	Email:	
name.			iei.	Lillall.	

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